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The Journal of the Australian Branches of the British Medical Association.

VOL. II.—4TH YEAR—NO. 1. SYDNEY: SATURDAY, JULY 7, 1917. PRICE 6D.

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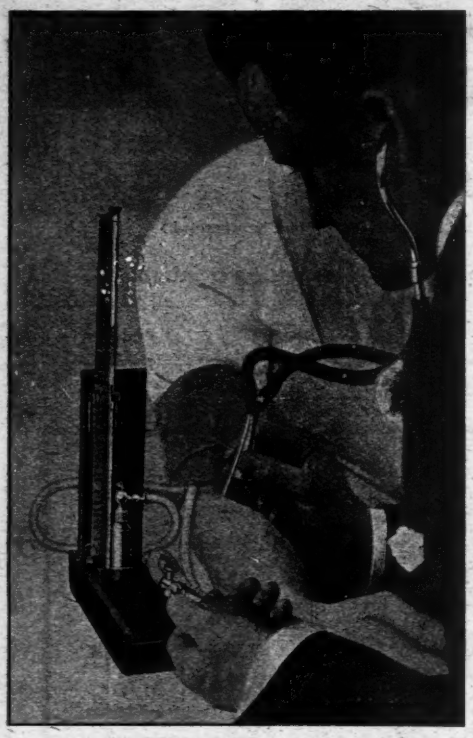

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TO THE MEDICAL PROFESSION.

We beg to state that we have received a limited number of the Ephemeris Pharmacologica for 1917 issued by Messrs. Oppenheimer, Son & Co., Ltd., London, and shall be glad to hear from any member of the Medical Profession who has not received one, and who wishes a copy, which will be sent post free.

It is a matter of regret that the necessity of keeping this Medical Diary and Visiting List a suitable size for the pocket, renders it impossible to incorporate more than a terse synopsis of the more recent publications relating to drugs. We venture to hope, however, that the 1917 edition will meet with an equally cordial reception as previous editions, and that members of the Profession will continue to favour us with suggestions for the improvement of this miniature publication.

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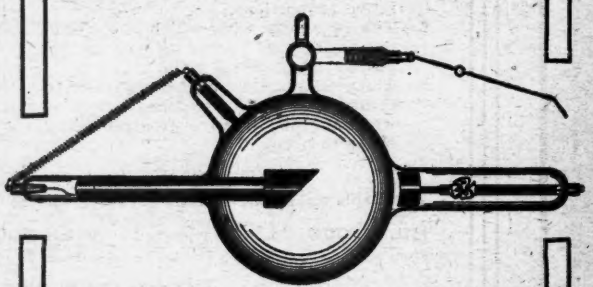

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VOL. II.—4TH YEAR. SYDNEY: SATURDAY, JULY 7, 1917. No. 1.

EXTRACTS FROM A GENERAL PRACTITIONER'S NOTEBOOK.[1]

By C. Joyce, M.B. (Melb.),
Pinjarrah, Western Australia.

The country practitioner's lot is rather a harder one than that of his city confrère. His patients are scattered, entailing much travelling; roads are bad, and it has been my joy to have my car bogged on a wintry night miles from anywhere, and have to go on five miles on foot. He has frequently to take on responsibilities such as would cause the city man to ring up a consultant or an anæsthetist and assistant for operation. The operations I have had to perform *solus* include two amputations of the forearm. In one I had only a pocket case, boiled thread for ligatures, a boiled butcher's saw, and a constable for assistant, who fainted just when I began to get busy. Appendicitis with perforation, perforation of the bowel in typhoid fever, strangulated hernia, and intussusception have demanded instant operation, and forbad the delay necessary to bring my far-away nearest neighbour. I have had to do several tracheotomes for diphtheria and one for croup. In 13 years in this State I have operated five times for intussusception, four times *solus*. Two of the patients did not recover; and these were simple ileo-colic cases; both did well for about 24 hours, and then intractable vomiting set in, without any signs of peritonitis. I am inclined to attribute the result to paralysis of a segment of the bowel, and in future in a similar case would try draining the paralysed bowel. In one case I delayed operation, as I was not sure of the condition. The child screamed loudly at 8 a.m., seemed to have severe pain for half an hour, and then was easier, but had recurring pain at intervals through the day. The bowels moved well after an enema. There was no bloody mucus and no tumour to be felt and no vomiting. I suspected intussusception, but did not operate till 9 p.m. I found about 1½ inches of the ileum drawn into the colon very easily reduced and little sign of local inflammation. I am inclined to think that had I not delayed, this child might have recovered. Two of the successful cases were very unusual, and were published in the *Australasian Medical Gazette*. I would lay stress on getting these cases on the operating table at the earliest possible moment. In nearly all these cases I have had the advantage of a cottage hospital and a nurse or nurses, but some of them were done in cottages in circumstances that would seem to forbid a successful result, but did not. Naturally, you do not operate and give an anæsthetic if you can avoid it. I have done radical cure of hernia, excision of hydrocele, resection of rib for empyæma, amputation of fingers, drainage of abscess of appendix, and cœliotomy for perforation in typhoid under local anæsthesia. In the last named the situation of the pain and irritability of bladder, with frequent and painful micturition, enabled me to alight right on the perforation; the patient, however, developed general peritonitis next day and died.

In midwifery work one has some trying cases. It is disconcerting to travel 12 miles into the bush and find an arm presenting. I managed to turn, with happy results. I have had two partial *placenta praevia* cases, with profuse hæmorrhage. I put the patients well under chloroform, pushed aside the placenta, got hold of a foot and brought it down. The effect of the anæsthetic being allowed to wear off, the mother was allowed to do the rest. The mothers recovered; the children were still-born. When doing my midwifery course I was taught to give an antiseptic douche (intra-uterine) to the mother, who had just completed labour. In my first years of practice I had several cases of septic infection as a result of this mistaken procedure. Iodoform was regarded as the one antiseptic with which to combat the infection; it was injected into the uterine cavity in emulsion, or passed in in the form of bougies, or the cavity was packed with iodoform gauze. Intra-uterine douches, curettings, etc., did not avert the greatest calamity that can happen. I saw two mothers die and several others recover after a very dangerous illness. Later, I noticed that if iodoform be moistened with liquified phenol and then water poured on, the iodoform will remain at the bottom instead of floating on top and clinging to the side of the vessel. I prepared it for the douche-can in this way, pouring in the iodoform after the uterine cavity had been well flushed with the first portion of the liquid—a weak carbolic lotion. Since then I have seen these septic cases recover in a manner that causes mingled feelings of surprise and pleasure, similar to the feelings that the use of antitoxin in diphtheria still excite. I saw diphtheria before the advent of antitoxin, and never use the latter without thinking of the old days. Gentlemen, for about 15 years I have been using iodoform in this manner. I have obtained in a great number of cases results quite different from those I obtained before, and cannot think I err in attributing the results to the procedure. My nurses have been very similar to the lady described by Dickens. Twice I have been called to four cases being attended by the one lady in their homes, all septic. Recently one of my patients ran a normal course, and got up on the tenth day. The lochia had been suppressed for three days. After she got up there was a profuse, very offensive discharge. She had a rigor, and was put back to bed. I was sent for, and found the temperature 40° C. (104°

[1] Read at a meeting of the Western Australian Branch of the British Medical Association on April 18, 1917.

F.), the pulse very rapid, and the patient seemed very ill. I gave a douche with iodoform, and next day the temperature was normal, remained so, and there was no further trouble. Apart from the fact that the iodoform is brought intimately in contact with the cleansed uterine wall, I can offer no explanation, but would mention that I read in the *British Medical Journal* last year an account of the results obtained by introducing various substances into the living tissues, and it was found that iodoform (1 part in 2 millions) greatly stimulated phagocytosis. The old theory that iodoform liberated nascent iodine may be superseded. I have rarely had to employ a second or third douche, but when I have done so, I have noticed particles of iodoform from the previous injection adhering to fragments of blood clot.

Some years ago I read in some journal a paper advancing the theory that mammary abscess always began in the ducts, and that firm massage, the pressure being exerted towards the nipple, combined with suction by a breast pump, will generally produce some strings of milk curd. I tried it, and found that the writer had not been romancing, and since then have rarely required the scalpel. When trouble is threatened in the breast I show the nurse how to massage. Occasionally I have administered chloroform, and instruct the nurse to repeat the treatment every hour or two hours through the day, and leave it to the baby at night.

Infantile mortality from diarrhœa was a great distress to me in my first years of practice. I endeavoured to keep the babies alive by giving all sorts of easily digested foods. Now I know I was giving those infants food which they could not possibly utilize; it was therefore useless to them. Further, it allowed bacteria to fluorish, and kept them poisoned by toxins. The dangers to these infants are poisoning by toxins, and the withdrawal of water from the system by diarrhœa and vomiting. I order mothers to give a few teaspoonfuls of water every few minutes; occasionally I think a saline enema or saline injection, hypodermically or intravenously, called for, and allow no food till the next visit. Then, according to the temperature and general condition, more water or barley water, raisin water, or whey, and a gradual return to the usual diet. Since I read a paper by Dr. Ellis, of Coolgardie, on the use of Epsom salts in this condition, I use little else. I administer a dose of castor oil at the surgery, and a mixture to go on with, containing 0.6 to 1.2 gramme (10 to 20 grains) of Epsom salts, with liquorice and peppermint water every two hours. Sometimes this does not seem to agree, and I give 0.3 c.cm. (min. v.) each of castor oil, glycerine, tincture of rhubarb, with mucilage and peppermint water every two hours. I give an occasional dose of calomel, but bismuth, etc., I never have need for.

When a child suffers from pneumonia it is similarly unable to digest food. I tell the mothers the food would not digest; it would ferment and form poisons; and have no difficulty in persuading them to give the child nothing but water till the temperature falls. We base our opinion on experience, and I firmly believe that feeding in pneumonia prolongs the febrile stage and retards recovery. This experience is founded on cases in my present district at Katanning, Greenbushes and the goldfields. I have applied the same argument to adults, and excepting alcoholics and septic pneumonias, they have done marvellously well on water, and they just love the water; little patients beg and do not wish for anything else. It would be very interesting to know if a pneumonia patient fed would not lose weight as quickly as one kept on water.

I am not aware of a teacher or a text-book who describes the physical signs in empyæma as I generally find them. The dulness is there, but in place of distant or absent breath sounds there is bronchial breathing; in place of diminished voice sounds, they are increased, and you may get whispered pectoriloquy. This is easily understood when we consider that the whole lung is not pushed away from the chest wall and compressed, as in pleurisy. The lung is bound to the chest wall at the edges of the pus cavity, pushed away and compressed at the centre, the whole abscess being cone-shaped, the base at the ribs and the point of the cone close to a large bronchus. Recently I saw a paper advocating opening an empyæma by an incision between the ribs, and fixing a piece of rubber tissue to the chest wall, so that it hangs over the opening. I have had one opportunity to try it in a child of two years. It did remarkably well. The rubber flap (the palm of a glove) allowed free exit of pus, and acted as a valve, so that if a little air got in it was soon expelled.

Concerning tuberculin, I have had antagonistic results in different cases. A youth of 18, ill for six months, losing weight, with no appetite, a temperature of 37.3 to 37.7° C (99° to 100° F.), the right lung involved about the upper third, no signs of cavity, abundant sputum and tubercle bacilli. I kept him in bed a few days, then started him on a very small dose, and was able to keep increasing the dose, till he was taking 0.5 c.cm. of Koch's original tuberculin. He made a rapid recovery. I saw him recently—two years later—and he has keep quite well.

A woman, aged 30, came to me with an enormous ankle, which she attributed to rheumatism. She had been ill for eight months. I let out 0.3 litre (½ pint) of pus, put drains through the joint and under the anterior annular ligament. Later I filled up the cavities with chalk paste, and started her on tuberculin. It agreed with her, and she got well and has kept well, with a stiff ankle for 18 months. But for tuberculin I think it would have meant amputation. Other cases react to minimal doses, and you can never increase the dose. Different tuberculins yield the same result. The patient is sensitive to tuberculin, and it is of no use to him. The presence of a mixed infection does not seem to explain the idiosyncracy. Referring to ectopic gestation, I recall three patients with similar history; frequent and irregular menstrual discharge for a few weeks,

then a sudden severe pain which only lasted a while. When I saw these patients the pouch of Douglas was full of blood clot. As the hæmorrhage had occurred some days previously, and had stopped, I left "fairly well" alone, except that in one case I relieved tension by aspirating a soft portion of the tumour, and obtained blood-tinged serum. The mass of blood-clot eventually absorbed. I expect I am known as the starvation doctor in my district, for whenever a man or woman (generally in the declining days of life) comes to me with a failing heart and burdened by 30 to 50 kilograms (60 to 100 lbs.) of fat, I explain that the heart is weak because of the burden they carry. I recommend a small cup of milk and one biscuit three times a day, and only a little water. The improvement is marvellous while they keep to the diet, but unfortunately they generally return to their gluttonous ways.

So many of our slight ailments, such as bilious attacks, are due to toxic conditions, and as with the bilious patient, the first thing we have to do is to get rid of as much of the toxins as possible. This is where I feel at a loss. If we knew more about food and what happens to it inside us, and could tell our patients how not to manufacture toxins, how not to absorb toxin—if he must make it—then indeed would we justify our existence. I have had the advantage of following the career of a man for a quarter of a century. As a youth he was strong, but suffered from indigestion and occasional bilious attacks. Later he had attacks of palpitation, and later still occasional irregularity of the heart. Now he has a dilated heart, which is always irregular, and has recently developed a murmur. He is breathless on exertion, yet till now he has never had an illness to send him to bed, or any sign of kidney disease. When his stomach was disordered, he would have very high blood tension. The toxins which raised the blood pressure probably weakened the heart muscle, which failed to meet the extra tax and became dilated. Toxæmia seems to be responsible for some cases of diabetes. I am at present attending a stout lady of 60. Ten days ago she was very ill and puffy looking and torpid, suggesting myxœdema. The first urine test gave a dense cloud of copper, with the addition of one drop of urine. She has had two fasts, one of two, one of three days, each preceded by 30 c.cm. (one ounce) of castor oil. The last urine test showed no sugar, but what caused remark by her friends was the wonderful general improvement. She had lost her mental and bodily hebetube, and was, as they expressed it, a different woman.

A few words about fads. Quacks are always exploiting the public, and are helped to boom their products by the medical fraternity. For example, there are a number of kaolin preparations on the market, warranted to cure all human ills. A resident of my town came home from a holiday with a huge carbuncle on his neck, a letter from a medical friend, and a huge plaster of impervious kaolin on his neck. Another came home with the same stuff on a large ulcer of the leg. I am of the opinion that the old-fashioned linseed poultice can do all that any of these expensive tinned things can do.

A METHOD OF OPERATING FOR RETRO-DISPLACEMENT OF THE UTERUS.

By H. W. Sweetnam, M.B., B.S.
Surgeon Superintendent, Launceston Hospital.

One hesitates to contribute an article on such a well-worn subject in medical journals as the surgical treatment of the retro-displaced uterus. I do not wish here to discuss the indications and contra-indications for and against the surgical treatment of the condition, nor to deal with the various operative procedures which may be best for different classes of cases, but merely to report one method of operating which is applicable to a large number of cases, and which to my mind is surgically sound, and is productive of satisfactory immediate and late results.

It will generally be conceded that the best operation to perform is that which will restore and maintain the uterus in normal position with the least disturbance of the normal anatomical condition of the pelvic organs as a whole. Any method which satisfies this indication necessarily interferes as little as possible with the normal course of a later pregnancy.

Alexander Adams' operation for shortening the round ligaments is, I think, the operation of all those devised which satisfies this indication best. As usually performed, however, through two small inguinal incisions, its use is strictly limited, and it has this one inherent fault, that it is an extra-peritoneal operation performed on an intra-peritoneal organ, or rather set of organs. The mere fact that a retroverted uterus is readily reduceable bimanually, and stays forward, and that the tubo-ovarian regions appear normal, does not mean, as I have had frequent occasion of observing, that no pathological and symptom-producing condition exists in the adnexa. On the contrary, I have found unexpectedly diseased ovaries adherent to the back of the broad ligaments, the tubes with abdominal *ostia* closed and together with the ovaries covered by a film of adhesions. These and other conditions can and do exist with a perfectly mobile uterus, and give no indication of their presence on pelvic examination.

To perform the ordinary Alexander-Adams' operation with such conditions present can only lead to bad results. The extra-peritoneal operation was therefore largely given up by me, and some less desirable procedure anatomically, such as Gilliam's operation or Webster's sling operation, performed. For the last three years, since practising the operation reported below, Gilliam's operation is never performed for retroversion *per se*, but is reserved for such cases as *prolapsus uteri*, in which some definite anchoring fixation seems to be indicated.

The operation I am about to describe is merely a modification of the original Alexander-Adams' method. The essential features of it are: (1) a

transverse superficial supra-pubic incision, and (2) a vertical mid-line entry of the abdomen, permitting the palpation and inspection of the pelvic organs, appendix, etc.

The details of the operation are as follows: A transverse incision is made at the upper pubic hair margin, extending from one superficial epigastric vein to the other, and carried down to the aponeurosis. These veins are constant, and form a good landmark as to the length of the incision required. They need never be divided. The subcutaneous fat is then cleared cleanly up off the aponeurosis with gauze stripping and a few touches of the knife. A vertical incision is now made in the mid-line through the aponeurosis, the incision extending upwards from the pubis for a length of 1½ to 2 inches.

This exposes the rectus fibres, which are separated with the handle of a scalpel. The peritoneum is picked up with forceps and an opening from 1 to 1½ inches made into the abdomen. Through this opening the uterus can be palpated and inspected, and the tubes, ovaries and appendix can be delivered. Should a pathological condition of the adnexa be present it can be dealt with, the incision being enlarged for the purpose if necessary. The round ligaments are then shortened.

With the gloved finger and gauze the fat is stripped downwards and outwards, exposing cleanly the aponeurosis overlying the inguinal canals. The canals are then opened, a split in their aponeurotic roof an inch long being sufficient. The ligaments can usually be seen in the canal at once, and they are always easier to find in difficult cases than when the usual Alexander-Adams' method is employed, owing to the better exposure. The ligaments are picked up with dissecting forceps, and their coverings stripped up towards their uterine attachments by gauze stripping and forceps. The amount of shortening required to bring the uterus into the desired position is determined by a finger in the abdominal wound. If the ligaments are small they are pulled away from their external ring attachments without ligature, no bleeding resulting. Should they be large or their veins varicose and dilated they should first be doubly ligated with catgut and divided between. The ligaments are now lying cleared of their coverings in the canals, and attached only by their uterine ends. They are fixed in the shortened position as follows: The tip of the left index finger is hooked up slightly under the lower arched border of internal oblique muscle, a Spencer Wells' forceps is then thrust through the aponeurosis and the internal oblique down on to the tip of the index finger, the forceps entering the aponeurosis at a spot a half inch above and one inch internal to the internal abdominal ring. The free end of the ligament is caught up in the forceps and drawn through, care being taken not to include the ilio-inguinal nerve. The ligament is pulled taut, the uterine position again verified by a finger in the abdomen and the ligament then fixed to the aponeurosis as it perforates it by two catgut stitches placed at right angles. This process is repeated on the other side and the abdominal wound is closed, both peritoneum and aponeurosis being sutured with continuous catgut stitches. The free ends of the ligaments are again taken up and tied together, only the first turn of a knot being made. A full knot is rather apt to leave a lump under the scar, which the patient at once detects. This half knot is made to lie centrally over the sutured aponeurotic line. In this position it is sutured down to the aponeurosis, thus giving a further hold to the ligaments. The redundant parts of the ligaments are now cut away close to the knot. The slits in the aponeurosis over the inguinal canals are closed with catgut, and the transverse wound brought together by a continuous catgut stitch for the fat in a deep and superficial layer, and by a horsehair stitch for the skin. A gauge and collodion dressing is applied. The uterus in all cases of retro-displacement is first curetted.

The advantages claimed for this method over the ordinary Alexander-Adams' operation are:—

(1) It is a sounder surgical procedure, there being no possibility of leaving behind in the pelvis an undetected pathological condition.

(2) The exact position in which the uterus is placed can be determined both by sight and touch.

(3) It greatly lessens the contra-indications to the Alexander principle of dealing with a retro-displaced uterus.

(4) The uterine condition and a diseased appendix can be dealt with through the one incision, still preserving the Alexander principle of treating the displacement.

Reports of Cases.

GRANULOMA PUDENDI.[1]

By C. G. Thorp, M.B., C.M. (Edin.),
The Residency, Onslow, Western Australia.

A young aboriginal female of about 19 years of age had some small patches of granuloma about the vulva and vaginal orifice for some years. They had been burnt, I understand, more than once, by a previous medical resident, so when I took charge here, as they appeared to be absolutely quiescent, I did nothing except apply *unguentum hydrargyri*, which seemed to have a beneficial effect.

The young woman had a trip to Perth, where she was treated by a general practitioner. On her return the patches were rather larger than when she left, but again settled down. The tribal husband became impatient of her long detention, and requisitioned her, so that she left without leave, and remained away for some four months, returning in a pitiable condition, some three months pregnant, and the whole of her external *genitalia* almost entirely ulcerated, as also a ring within her vagina of some 1½ to 2 inches wide.

I scraped some large patches on each thigh and also some among the softened labia, dressing with *unguentum hydrargyri*. The outer patches healed for a time, but broke down later, while the inner scraped portion was not benefited, the increased circulation due to the pregnancy having apparently a stimulating effect on the growth. I then read the report by Drs. G. C. Low and H. B. Newham, in the English Journal for September 16; no formula, however, was given for preparing the antimonial solution for intramuscular or intravenous injection, and I could find none in Martindale. On October 21, Dr. Castellani had an article in the Journal, giving what I required, and I made up his No. 1 intramuscular formula.

I gave the first injection on January 8, and as she was then about six months pregnant, and the case reported by

[1] Read at a meeting of the Western Australian Branch of the British Medical Association on April 13, 1917.

Drs. Low and Newham took three months to cure, I thought myself justified to run some risk of sloughing; so I gave 1 c.cm. in the gluteal muscles, on alternate sides, daily. I scraped a large patch on each great labium and dressed with 25% antimonial ointment in vaseline. This, however, caused the ulcer to spread, and I replaced it with *unguentum hydrargyri*, both the wounds healing kindly.

I gave 16 daily injections, when the mucous membrane lining the vagina was healed over, but thin, and bleeding easily. The ulcers and warty growths were much smaller, and altogether she was nearly well.

The pain which I expected from the injections did not come till nearly the end of my continuous series, and I am not sure now whether the pain was severe, as I had to give her chloroform daily to make the injection, which I plunged into the muscles to the full depth of an exploratory needle, as she was most hysterical.

There has been no threatening of sloughing; there have been two superficial inflammatory lumps, which may be due to some of the injection escaping just under the skin, as the plungers of Burroughs, Wellcome and Co.'s glass syringes are heavy, and have a tendency to fall by their own weight.

Since giving the last of the daily injections on January 28, I have given them on January 26, 30, 31, and February 1.

One large granuloma wart has ulcerated on the right thigh since I began this treatment, but is, I think, healing under 10% antimonial ointment.

The patient now makes so much of the pain after an injection that I have stopped them. Whether the ulceration will recur it is, of course, impossible to say, and if I were quite sure that the cicatrices of the healed ulcerations would not interfere with the confinement I would keep her here, but she is of a quite extraordinary size, so I am sending her to the island, where there is more assistance than I have, as there is not even a midwife in this place.

NOTES ON A CASE OF STRANGULATION OF THE CAECUM IN AN INGUINAL HERNIAL SAC COMPLICATED BY ACUTE APPENDICITIS IN AN INFANT SIXTEEN MONTHS OLD.

By **Howard Bullock, M.B., Ch.M. (Syd.), F.R.C.S. (Eng.), B.Sc. (Oxon.),**

Honorary Assistant Surgeon, St. Vincent's Hospital, Sydney, Honorary Assistant Surgeon, Sydney Hospital, Senior Surgeon, Renwick Hospital for Infants, Sydney.

Strangulation of the caecum in an inguinal hernial sac is in itself a condition of uncommon occurrence, but when found in a child 16 months old and complicated by the presence of acute appendicitis in the sac, it is sufficiently rare to warrant publication.

Such was a case that came under my notice at the Renwick Hospital for Infants some months ago.

The history of the case was somewhat indefinite, but as far as I could ascertain the child had given indications of having suffered from sudden pain in the abdomen, accompanied by vomiting, which persisted till it was operated upon. The mother had noticed that the hernial sac became tense and tender to touch. When I saw the child about four hours after the onset the temperature was just above 37.8° C. (100° F.), the pulse-rate 120 and he was in obvious pain.

The sac was tense and very tender, but there were no signs in the skin of the deep-seated inflammation.

An incision was made over the hernial protrusion, along the interspinous fold; the sac was exposed and opened, and the external oblique aponeurosis slit up. Turbid fluid escaped, and the inflamed appendix, which was covered with lymph, was removed; the gut was freed and returned to the abdominal cavity.

After cleansing the wound with gauze dipped in saline, the sac was closed, slight repair of the displaced muscles made, and the subcutaneous tissues and skin brought together without drainage.

The performance of the operation took twenty-five minutes, a factor of importance in the success of the case.

The patient had an uneventful recovery, leaving the institution on the eighth day, at the mother's request.

When seen quite recently he was enjoying excellent health.

Undoubtedly both strangulation of the bowel and acute appendicitis existed in the sac.

Before finishing my remarks, I should like to emphasize a point which is not mentioned in text-books, and which all operators must have observed in strangulated herniæ in babies, *i.e.*, that the strangulation takes place not, as in adults, at the abdominal inguinal (internal), but at the subcutaneous inguinal (external) ring.

This condition I first noticed remarkably pronounced in two cases of strangulated herniæ in babies three weeks old some years ago, when House Surgeon at the Evelina Hospital, London. One of them was operated upon by Mr. Maynard Heath; the other he allowed me to do. Both of them, in spite of the gangrenous-looking strangulated bowel, which was simply replaced, did exceedingly well.

NOTES ON A CASE OF EMBRYOMA TESTIS.[1]

By **H. M. Moran, M.B. (Syd.), F.R.C.S. (Eng.),**

Sydney.

A child, E.M., which had been born with the vertex presenting eight months before, was seen by me in August, 1912. There was a swelling of the right testis, apparently painless, over which the scrotal skin moved freely. The mother stated that she had first noticed it when the child was three months old, and that she was sure that it was increasing in size. The same month under anæsthesia by Dr. Chapman at the Balmain Hospital I removed the testicle and spermatic cord up to the internal ring. The testicle was sent to the Bureau of Microbiology and Dr. Cleland's report and comments follow.

The child was seen in January, 1917, in excellent health and without any sign of secondary development.

Dr. Cleland's Report.

Macroscopically the growth was an irregular oval mass, about 2 inches by 1½ inches in size, with at one end a piece of tissue partially attached and partially folded back. A section made through the growth showed fibrous septa and several small cavities with whitish, mushy or mucoid contents. There could also be seen small islets resembling cartilage, and some small irregular bony flakes, some nearly half an inch long.

Microscopically sections have revealed the following structures more or less mixed together:—

Squamous epithelium showing marked cell-nests, marked prickle cells, sebaceous glands, hair follicles, and hairs. Many scattered islets of cartilage in various stages of formation, some showing calcification. There were also irregular bony flakes. In addition to these were scattered duct-like and cystic spaces, some of considerable size, and lined by various types of cells. The lining cells sometimes consisted of several layers of tall cells with a pronounced fimbriated margin, suggestive of cilia; in other cases a large space would be lined by a single layer, or two layers, of tall columnar cells, frequently distended with mucoid-like contents, and suggestive of intestinal epithelium; in other cases, spaces were lined by several layers of cubical cells. Some of the larger spaces had in their walls bundles of unstriped muscle. In other situations collections of spindle-shaped connective tissue cells were grouped together, and in one situation a number of cubical cells irregularly grouped in spaces.

Comments:—The tumour is an embryoma of the testicle, and is undoubtedly closely allied in its ætiology to the well-known ovarian dermoid. In this particular instance it showed numerous elements of epidermal origin, cartilage, bone and unstriped muscle, and also

[1] Read at a Meeting of the New South Wales Branch of the British Medical Association on June 8, 1917.

tissue resembling the intestine. The spaces lined by the ciliated cells possibly did not really belong to the embryoma, but may have been derived from structures in the epididymis. The spaces thus lined, however, were in close association with cartilage and other structures, which was rather against this view and in favour of their actually being part of the embryoma itself. Such tumours of the testicle are very rare. No structure suggestive of syncytial masses or cells corresponding to those of Langhans' layer were seen.

Embryomata of the testis are very rare in human beings, but commoner in some of the domestic animals. In some instances chorion-epithelioma has been present, but such was not detected in this case.

An embryoma is a tumour containing elements originating from the three primary layers of the embryo epiblast, mesoblast and hypoblast. The elements found originating from the epiblast may be solid epithelial rods, stratified epithelium lining cysts, teeth, grey matter, rudimentary retina, or even portions of the spinal cord: from the mesoblast, connective tissue in various forms, unstriped muscle, hyaline cartilage and bone: from the hypoblast, columnar epithelium, ciliated epithelium, and alveoli, resembling tubular glands.

According as elements from one particular layer predominate, the picture in the malignant form presented will be that of carcinoma, sarcoma or chorion epithelioma. The last named is held to arise from an early stage of the developing epiblast.

Embryomata have been classified by Nicholson[1] as fibrocystic, cystic (dermoid), and chorion epithelioma. While the cystic form is more common than the solid form in ovarian teratomata, the cystic form in the testicle is much rarer.

According to Bland Sutton[2] in thirty years only five examples were recorded by British surgeons (D'Arcy Power 1887, Jackson Clarke 1896, Bland Sutton 1903, Kuhne 1908, Barrington 1910).

The distinguishing mark of true cystic embryomata is that they are covered by the *tunica albuginea*, whereas scrotal dermoids are outside it.

Schlagenhaufer[3] was the first to point out that the chorion epithelioma tous variety arose from an early epiblast. Nicholson[4] described four cases. Syncytial tissue was present, often with islets of cartilage and not infrequently a hæmorrhagic extravazation was present, partly obscuring the picture. This variety of tumour at times contains villi resembling a vesicular mole. They are very malignant and metastases have been found in the brain, lungs, liver and abdominal glands.

The question as to how these embryomata originate has generated much discussion and many theories. Nicholson favours the explanations of Wilms that they arise in the reproductive cells themselves by a process allied to parthenogenesis. Verneiul, whose paper (*Mémoire sur l'inclusion scrotale et testiculaire*) is quoted by Bland Sutton[2], held that they belonged to the same class of double monsters as parasitic fœtus. Shattock holds that they arise from fertilization of the germ cells of the genital ridge by a casual spermatozoon. Others hold the origin to be from the Wolffian body or mesonephros which persists in the male as the paradidymis.

It is obvious that growths so complex and so varying will present wide differences in their behaviour. While in many instances the solid embryomata remain benign, they exhibit not infrequently a malignancy, which may have its jumping off place either in the connective tissue or in the epithelial elements, and according to this the pathological condition will develope on carcinomatous or sarcomatous lines. Horsley[4] in the "Transactions of the Pathological Society," recorded a case in which the secondary deposits of the lung were distinctly sarcomatous, although the primary growth contained spaces lined with columnar epithelium. The classical case of Paget, mentioned as a malignant enchondroma, was subsequently declared by Kanthack and Pigg to be columnar cell carcinoma with cartilaginous stroma, and now Nicholson claims it as an embryoma.

The lymphatic glands of the testicle, three to five in number, lie on either side of the aorta at the level of the kidney. The question of removing these glands in malignant disease of the testicle is still an open one. A clinically appreciable mass in this position is held to contra-indicate any attempt at removal. Chevassu foreshadowed this operation in 1906, and in 1909 Bland Sutton reported a successful case.

The extra-peritoneal method of operation is the one recommended, and Thompson Walker gives mention of thirteen such cases "without as yet very encouraging results."

References.

1. Quoted by Thompson Walker, "Surgical Diseases and injuries of Genito Urinary System," 1914.
2. Bland Sutton, "Tumours, Innocent and Malignant," 1910.
3. Schlagenhaufer, quoted by Thompson Walker.
4. Raymond Johnson and T. Lawrence, in Choyce's *System of Surgery*, 1915. Vol. I.
5. *Lancet*, November 13, 1909.

COLITIS POLYPOSA.[1]

By **P. E. Walton Smith, M.B. Syd., M.R.C.P. Lond.,**
Pathologist, No. 4 Australian General Hospital, Honorary Assistant Physician, Royal Prince Alfred Hospital, Sydney.

A returned officer recently died at No. 4 Australian General Hospital. He had been invalided home suffering with chronic dysentery. The diagnosis made was ulcerative colitis. A post-mortem examination was allowed at which the rare condition of *colitis polyposa* was found in the large bowel.

The history of the case is as follows:—

The patient, *aet.* 25 years, went with the Expeditionary Force to New Guinea. There was no history of malaria. He returned to Sydney and was then sent to Gallipoli; while there he developed dysentery, in September, 1915. He was off duty for five months. In the following month (March, 1916) he was sent to France, where he again became ill with dysentery, passing blood and mucus. He had to go off duty, remaining a "cot case" until his death in April last.

For eight months he was an inmate of No. 3 General Hospital, Wandsworth.

Repeated examinations of the stools failed to reveal the presence of any organism associated with dysentery. He was very ill, was unable to sleep, and was troubled with diarrhœa and severe abdominal pain which necessitated the administration of large doses of opium. He was given belladonna suppositories to relieve tenesmus, and bismuth by the mouth. He had slight elevations of temperature.

On admission to No. 4 General Hospital in March, 1917, he complained of severe abdominal pain, mainly in the left iliac region, and pain about the anus. He had to some extent lost control of the sphincters. There were eight to ten motions in the twenty-four hours.

On examination *per rectum* a thickening of the mucous membrane was found and a stricture about 6.3 cm. (2½ in.) above the anus, which was acutely tender. The patient gave a history of having great difficulty in passing motions that were at all formed, and the result consisted of more or less ribbon-like pieces.

Examination of the fæces for amœbæ gave a negative result. There was blood present. A blood count on March 14th showed erythrocytes 3,500,000, hæmoglobin value 60%, colour index 0.8, leucocytes 21,750, with 71.5% neutrophiles, *i.e.*, a neutrophile leucocytosis.

The blood gave a negative Wassermann reaction. Nothing pathological was found in the urine. The test for indican was negative.

A snipping was removed from the rectum for histological examination. This showed inflammatory thickening of the mucous coat, with some destruction of the epithelial cells. There was no evidence of malignancy. On April 3rd, the patient became very much worse; he had a rigor,

[1] Read at a meeting of the New South Wales Branch of the British Medical Association, on June 8, 1917.

the temperature rising to 40.5° C. (105° F.) and the pulse-rate to 140. There were frequent rigors and high fever until his death, on April 9th. During this period the stools were most offensive, and contained blood and mucus. The bowel was irrigated with Condy's fluid, followed by sterile water. A blood examination failed to show the presence of any malaria parasites. A blood count done on the 8th April showed a drop in the red cells of 1,000,000 (*i.e.*, from 3½ to 2½ million). The hæmoglobin value was 55%, and the leucocytes 13,000.

Post-mortem examination: The organs showed evidence of anæmia. The heart muscle was pale and flabby, and the chambers of the heart dilated. There were petechial hæmorrhages in the epicardium.

The kidneys were enlarged, and had the appearance of cloudy swelling.

The size of the spleen was three or four times that of the normal; it showed active hyperæmia of the splenic pulp and peri-splenitis on the capsule.

The liver was pale and fatty looking. There was also early chronic venous congestion.

Beyond pallor, there was nothing pathological to be noticed about the small intestine. The large intestine, however, showed a very marked departure from the normal. The whole of the mucosa was greatly thickened, which accounted for the narrowing in the rectum, and was studded throughout with numerous polypoidal excrescences projecting into the lumen of the bowel. They varied considerably in size, some being only slightly elevated above the general level, while others were distinctly stalked, and had a length of from 0.6 to 2.5 cm. (¼ to 1 inch). The condition was most noticeable in the transverse colon. There were small erosions of the mucosa but no definite ulcer formation.

Colitis Polyposa. Micro-photograph of Section of Transverse Colon, showing the Polypoidal Condition due to inflammation.

Sections of the bowel show the polypoidal condition to be due to inflammation. There is inflammatory thickening of the submucous coat consisting of œdema, a certain amount of fibrosis and infiltration with small round cells. The polypi are seen to owe their formation to the accumulation of great numbers of these small round cells, which may be lymphocytes or may have arisen from proliferation of the pre-existing connective tissue cells of the submucosa. The round cell infiltration is also noticeable in amongst the fibres of the circular muscle of the bowel.

From the spleen an abundant growth of a Gram-negative bacillus was obtained; it gave the sugar reactions of the *bacillus cloacae* or *bacillus lactis aerogenes*, which are the same and differ from *bacillus coli communis* in producing acid and gas in saccharose. The organism was not further differentiated. Taking into consideration the frequent rigors the patient had for a few days before his death and certain of the post-mortem appearances, such as the cloudy swelling in the kidneys, the septic spleen and the petechial hæmorrhage on the surface of the heart, it looks as if there had been a terminal septicæmia, with possibly this bacillus as the causal agent.

Dr. Pope, of Leicester, described a case of *colitis polyposa* in 1904. The patient was a young woman, who, for six months before death, suffered with chronic dysentery. In 1906 Carey Coombs recorded a similar case. Here again the patient was a young woman, aged 29 years. She too had a six-months' history of chronic dysentery. In each case the colon was found to be the seat of polyposis; the microscopical appearances were identical and were similar to those found in the present case.

"The term *colitis polyposa* has also been applied to a condition of advanced ulcerative colitis, in which such parts of the mucous membrane as have been spared by the destructive processare polypoid in form. The picture of such a colon, however, is one of ulceration with accidental polyposis, not of polyposis with unimportant ulceration."[1]

A similar condition of polyposis has been described in the stomach (under the name of *état mamelonné*).

"The cause of the condition is obscure. Perhaps it merely represents the final phase of what we are accustomed to call a simple catarrh of the bowel, though as this is common and *colitis polyposa* unusual, it is not likely that simple catarrh is responsible alone. It may result, on the other hand, from some specific irritant, such as mercury or arsenic, or some parasite which only occasionally makes man its host."[1]

The fact that this patient was for some time at Gallipoli, where he developed dysentery, seems to point to some parasite as the pathogenic factor in the production of the disease in this instance, although, as mentioned above, at no time was any such isolated.

I am indebted to Major O'Gorman Hughes for permission to publish the notes of this case.

Reference.

[1] *Medical Annual*, 1907, p. 197.

We regret to record the death of Dr. William James Barkas, which took place suddenly on June 29, 1917. Dr. Barkas was taken ill while attending a patient, and died within a very short time. He was 69 years of age.

A CASE OF WIDE PROPAGATION OF A CARDIAC MURMUR.[1]

By F. Guy Griffiths, M.D.,

Honorary Physician to the Royal North Shore Hospital, and to the Antituberculosis Dispensary of the National Association for the Prevention and Cure of Consumption.

The little patient whom I have demonstrated this evening has a cardiac murmur, which most of the members present have heard quite plainly over her sacrum.

She is a well-grown and healthy-looking child of six years, bright and cheerful among friends, but very quiet before strangers. She walks about quite actively.

The murmur was discovered after a mild attack of rheumatic fever, which had responded readily to salicylates, except that the cardiac dilatation persisted, and still persists. Dr. van Someren has suggested that the murmur is propagated through the bones; the child was very thin, and the heart very large, and so an unusual amount of it in close relation with the bony system. I do not find the explanation satisfactory, but I can offer no better.

The case notes are as follows:—

E.M.T., aged six years, was admitted to the Royal North Shore Hospital of Sydney on the 28th February, 1917, from the Out-patient Department, with pains in the joints (especially the right knee) and a temperature of 37.8° C. (100° F.). The patient seemed in a good deal of pain, and perspired freely during the first 24 hours. There was also a mitral systolic murmur.

There was a history given by the mother of very good health till a year ago, and then occasional pains in the joints. She was treated as an out-patient at the Royal North Shore Hospital. She had had some dyspnœa, from time to time, since.

March 5, 1917.—The patient seemed much better. She was not in any pain. She rested well at night.

March 10, 1917.—A most extraordinarly loud, rough systolic murmur was heard all over the chest, back and front. It was louder on the right than on the left side, and loudest and roughest near the inferior angle of the right scapula, and was there accompanied by a diastolic murmur, feebler than the systolic, but yet unusually harsh and loud, so that the two murmurs, which occurred at the rate of 92 each per minute (the pulse being to 88 or 90 when observed a little later), resembled exceedingly rapid and harsh breath sounds. The breath sounds could be distinguished, apart from the murmurs, but were much feebler and at a different pitch. At the left apex posteriorly the breath sounds were a little bronchial in character. The respiration rate was 40 to 44. No other morbid pulmonary sound could be found. There was no dulness over the lungs. The apex beat of the heart was in the sixth space, just external to the nipple line. The temperature was normal. The systolic murmur could be heard also in the right upper abdomen, 2.5 cm. (1 in.) below the ribs.

April 9, 1917.—The systolic murmur could be heard well down the back, over the loins, and even over the sacrum. It was louder over the spine than over the *erector spinae* on either side. It could be heard over the vertex of the head also.

She was kept eight or nine weeks on her back, but the cardiac dilatation continued.

May 11, 1917.—The patient was sitting up in the sun; the heart was steady; the murmur was not quite so marked. She appeared none the worse for sitting up.

A few days later the patient was allowed to walk about.

[1] Read at a Meeting of the New South Wales Branch of the British Medical Association on June 8, 1917.

INFECTIVE DISEASES.

The following information is culled from the Bulletins of the Quarantine Service, issued on April 27, May 11, May 25 and June 8, 1917:—

Variola.

The number of cases of small-pox notified in New South Wales between April 13 and June 7 was 30. On May 9, 1917, the *s.s. St. Albans* arrived at Thursday Island, from Kobe, *viâ* Hong Kong, with a Chinese passenger who was suffering from small-pox. The patient was landed at the Quarantine Station, and the vessel was allowed to proceed in quarantine to Townsville, Brisbane and Sydney after the usual precautionary measures had been taken.

During the fortnight ending April 14, 11 cases of variola, with nine deaths, occurred in Hong Kong. In the Dutch East Indies information concerning 265 cases and 96 deaths has been received. The reports from the Philippine Islands covering the period from March 18 to May 12, contain reference to 41 cases of varioloid without mortality, and 49 cases of variola with 15 deaths. There were two cases and two deaths notified in the Straits Settlements between March 6 and April 23. Forty-six cases of variola have been recorded between March 10 and May 28 and one death in the United States of America.

Plague.

The number of cases of plague reported in India between February 18 and April 21 is 157,788. During the same period there were 128,124 deaths. During the period from February 18 to April 21, 102 cases were notified in Ceylon. In Egypt there were 106 cases and 59 deaths between February 16 and April 12. The number of cases recorded in Java since the publication of Bulletin No. 8 is 81, and of deaths 70. There was one case and one death in Hong Kong during the fortnight ending May 11, and reference is made to two fatal cases during the week ending May 15. Twenty deaths are said to have occurred among plague patients in Burma during the week ending April 28. There were 25 cases in Mauritius between December 9, 1916, and February 1, 1917. In the Straits Settlements 12 cases and 8 deaths occurred between April 7 and June 4. There were five cases and three deaths in South Africa between March 5 and April 22. On April 24, 1917, a worker at the Bacteriological Laboratory at Noumea, in New Caledonia, succumbed to plague, accidentally contracted.

Cholera.

Since the last report from the Dutch East Indies, information concerning nine cases of cholera has been received. There were five deaths due to this disease in Burma during the week ending April 28. There was one case with one death in the Philippine Islands between April 15 and May 12.

Typhus Fever.

The distribution of typhus fever, according to the United States Public Health Service, for the period from February 24 to May 4, 1917, was as follows:—

Place.	Cases.	Deaths.
Russia	3,104	286
Mexico	866	*
Egypt	596	127
Java	163	7
Austria-Hungary	141	7
Turkey-in-Asia	57	11
Great Britain	20	2
Germany	14	8
China	8	1
Algeria	1	1
Italy	5	—
Switzerland	4	—
Netherlands	3	—
Siberia	1	—
Straits Settlements	1	—
Sweden	1	—
Greece	—	43
Spain	—	3
Belgium	—	1
Canada	—	1

*Estimated deaths daily during January and February, about 25.

Leper Lazaret.

The Leper Lazaret Reserve on Peel Island, Queensland, has ceased to be recognized as a quarantine area and station since May 18, 1917.

BRITISH RED CROSS MONTH.

A contribution of £10 10s. toward Lady Stanley's appeal has been received from Dr. R. H. Morrison. The total amount contributed by medical subscribers stands at £274 13s.

The Medical Journal of Australia.

SATURDAY, JULY 7, 1917.

A Direct Issue.

The argument has been used in opposition to the suggested demand that the medical profession should be compulsorily enrolled for enlistment with the Army Medical Corps at home and abroad, that conscription is desirable for the whole community, but not for a portion of it. Those who advance this argument apparently compare the position of the non-combatant medical officer with that of the combatant soldier. It may be conceded without cavil that compulsory enlistment for combatant service should not be sought for a section of the population. The position of the medical profession, however, is peculiar. It has to supply medical service to the whole community. The duty of the medical profession to apply all modern means to limit the amount of suffering, sickness and death among those who are fighting is not less and is probably greater than that of attending to the civil population. This double duty may not be lightly brushed aside. Men entering the medical profession should realize that they have a higher, a more sacred duty than merely earning a livelihood. Knowledge and skill are acquired for the purpose of battling against disease and injury, and the man who has these means at his disposal, has no excuse if he refuses to employ them for this purpose.

We have arrived at a stage of the war when the authorities in the Army Medical Services have found it difficult to supply the medical needs of the Army. In April last the War Cabinet took the extreme step of issuing an order in England and Wales, calling upon every medical practitioner of military age to undertake active military service. The Central Medical War Committee and the Committee of Reference immediately protested that such a procedure would deplete the ranks of the profession in England to a dangerous degree. The War Cabinet thereupon decided to withdraw the order and requested the Committees to supply the necessary number of medical officers for military duty. The Committees have experienced great difficulty in producing the requisite number. Similarly, in the Commonwealth the number of doctors asked for by the Director-General of Medical Services to undertake field duty is in excess of the available supply. In addition, there are many men who have been serving at great personal sacrifice for two years and more who should be relieved, were there a sufficient number of volunteers ready to don khaki. The medical profession in Australia is large enough to serve both the civil community and the military forces, provided that every man be used to his best advantage. Inefficient organization spells waste, and the margin is too small to admit of this waste without serious consequences to both sections of the Australian population. We have therefore to decide what means can be devised to economize the medical resources, in order that our soldiers shall have a fair deal and that the honourable, self-sacrificing few shall not be ruined in body and purse by having to bear the whole burden. We have seen the effect of an appeal to the sense of duty of the individual. Voluntary enlistment must of necessity fail, because many medical men find comfort while staying at home in the assumption that they can render signal service in this way. A moment's careful thought will show that the individual is a bad judge of the situation, since suitability for military service is a relative thing. A committee of selected medical men can judge with nicety which form of service each member of a group of medical practitioners can fulfil to the best advantage to the country. This means that if waste is to be avoided, each man must obey the call when it is directed to him. Compulsion is, perhaps, not desirable, but it is essential in the present grave impasse.

The medical profession as a whole has no responsibility in connexion with the means by which the combatant forces of Australia are maintained to the necessary strength. They have a grave responsibility to see that that part of the colossal struggle which is perforce entrusted to them is adequately performed. This cannot be done under the present arrangements, no matter how signally the Prime Minister fails in his endeavour to stimulate voluntary enlistment among the civil popu-

lation. We should not be misled into the vain belief that our duty will be done unless every individual practitioner of military age is required to perform some national service. A few exceptions may wreck the whole calculation, and consequently we would be building on a quicksand if we relied on voluntary enlistment. Much sacrifice is expected of every man; every man should give up something of value to him for the good of his country, in order to increase the well-being and fighting powers of our combatant soldiers. Those who are inclined to record a negative reply to the question referred to them by the Federal Committee should ask themselves whether this is not tantamount to a declaration that they are not prepared to make a sacrifice for the Empire which shields them.

We are also told that since the Federal Government has pledged itself not to introduce conscription without a direct mandate from the country, it is quite useless to ask for legislation dealing with the compulsory enrolment for enlistment of the doctors. The position of the medical profession is so distinct from that of the rest of the community that this objection does not hold. We have already stated more than once that if the response of the medical profession be favourable, the responsibility must rest with the Federal Government to refuse the demand of the doctors. It would be a heavy one. From a practical point of view, the medical profession has no concern with this aspect of the question. They can make a demand for legislative powers necessary for the performance of a national duty. They should make this demand and leave the rest to Parliament.

AUDITORY AFFECTIONS IN AIRMEN.

The condition known as mountain sickness and that which has been termed caisson disease have been extensively studied, and the effects of diminished atmospheric pressure on the human frame have been reconciled with physiological knowledge. When first men took to flying in the air like birds, it was recognized that the same laws as those which obtain when persons ascend to considerable altitudes would hold good. In addition airmen experienced the physiological effect of violent rocking motion. Physiological idiosyncrasy comes into play in regard to the effect of making a high flight, as it does in making a journey in a ship on a rough sea. Some individuals tolerate the rocking motion without disturbance of well-being, while others are deeply affected. The psychical moment is certainly responsible for the variations in effect, and it is therefore not surprising that in the excitement of a high and rapid flight violent rocking is better tolerated as a rule than is the same amount of motion on the surface of the sea. Aviation in warfare would seem to be still more exciting than pleasure flying, and it might be expected that the military airman, who is chosen for his steady nerve, self-control and intrepid pluck, would exhibit few, if any, of the signs of air sickness. While this has been confirmed in practice in the majority of instances, airmen at times experience disagreeable and possibly dangerous symptoms during and after a flight.

Dr. André Castex, a French otologist attached to the Military Hospital, Villemin, Paris,[1] tells us that auditory affections are common. His observations show that when the airman reaches an altitude of about 1,500 metres he experiences a sensation of fullness in the ears. If the mouth be opened at this stage, a sensation is felt as if a valve in the ear is suddenly opened. At this height the airman finds it necessary to keep his mouth open, since nasal respiration rarely suffices. The muffling of the ears and the relief of the feeling of fullness on opening the mouth disappears entirely when an altitude of 4,000 metres is reached. These sensations are said to be even more marked when the aviator descends. Often he does not hear the noise made by the motor. Valsalva's test of bearing down with the mouth and nares closed, or even the act of yawning, causes a feeling of dulness and weight in the head and of a painful occlusion of the pharynx, especially at the level of the tonsils. On their return to earth some aviators complain that they continue to hear the noise of the motor for a considerable time. A buzzing in the ears and a heavy feeling in the head usually clear off in five minutes or less, but they may persist. Vertigo is experienced at times, and there may be a transitory deafness. Dr. Castex has detected a definite congestion of the tympanic membrane, and even an ecchymosis in the posterior region of the tympanic attachment. Objective changes were met with in a few men who had suffered from a suppurative otitis media during infancy. The subjective symptoms were often associated with an old-standing sclerotic process of the tympanum or of the labyrinth. On the other hand, airmen with marked defects of hearing have been met with who fly without exhibiting subjective or objective disturbances. Dr. Castex suggests that these auditory changes and symptoms are produced by variations in the atmospheric pressure, and he attempts to explain the disappearance of the symptoms at a very high altitude by assuming that the man becomes accustomed to the difference in pressure of air and that in the tympanic cavity and of the blood. It is difficult to reconcile this assumption with the physiological effects produced in the air-pressure chamber. Dr. Quiserne has sought to explain the symptoms as manifestations of a failure on the part of the blood to adapt its pressure to the rarefied atmosphere. He sees in the symptoms evidence of a certain degree of

[1] *Bulletins et Mém. de la Société de Médecine de Paris*, December, 1916.

carbonic acid intoxication. On the other hand, it is not inconceivable that the disappearance of these subjective symptoms is entirely a nervous phenomenon, and that the objective suffusion and congestion continue to increase in due proportion to the diminution of the atmospheric pressure. The subject is worthy of further investigation.

THE PATHOLOGY OF DYSENTERY.

The experiences made in Gallipoli and Egypt have already increased our knowledge concerning the nature of the various forms of dysentery very considerably. In July, 1915, Captain J. G. Thomson and Lieutenant Bartlett demonstrated that the majority of the diarrhœic cases treated in the military hospitals in Egypt were amœbic in origin, and that but few were bacillary. It became an established practice to give a patient an injection of emetine pending the result of the search for the causal organism of the condition, while in very acute cases antidysenteric serum was given in addition. While this procedure was admissible as an empirical measure, it had one disadvantage. After the employment of emetine, it was frequently impossible for the protozoologist to find amœbæ in amœbic cases. Lieutenant Bartlett has made the suggestion that in nearly every case there is a true amœbic infection, and that not infrequently a secondary bacillary infection is grafted on to the damaged intestinal mucosa. Although the evidence on which this suggestion is based has not yet been published in full, we learn from Captain David Thomson and Captain T. J. Mackie[1] that Lieutenant Bartlett had found strong support in the post-mortem findings, as nearly every case in which there was a diffuse bacillary ulceration of the large intestine, showed amœbic ulceration of an earlier date. It was thought that the amœbæ were killed by the emetine, and that the pathological process was kept going by the bacteria infecting as secondary organisms. Further independent investigations, conducted both in Egypt and in England, revealed that while the bacillary nature of the infections was demonstrated by the agglutination and other tests, cysts of *Entamoeba histolytica* were found in a very large proportion of cases. In some cases neither amœbæ nor bacilli were discovered. The authors found in 30 cases carefully investigated that no dysentery organisms could be detected in 13, *i.e.*, in 42%, while in eight cases the bacilli found were atypical. A similar experience has been made by other observers in failing to find dysentery organisms in undoubted cases. It would seem as if the secondary organisms in some instances were capable of inducing a diffuse ulceration of the mucous membrane of the large intestine, and that the resulting condition would be a grafting of a bacillary dysentery on to an amœbic dysentery. The organism in these cases is the *bacillus dysenteriae* "Flexner Y" group, or some similar strain. On the other hand, bacilli incapable of giving rise to a selective ulceration of the bowel may keep the ulcerative inflammation caused by *Entamoeba histolytica* going for a long time after the amœbæ have disappeared. These organisms may be Morgan's No. 1, *bacillus faecalis alkaligenes*, streptococci and *bacillus proteus*. The authors naturally require more direct evidence before the suggestion of Lieutenant Bartlett can be accepted, but they recognize that their experience can be explained on this assumption.

[1] *Journal of the Royal Army Medical Corps*, April, 1917.

SYPHILIS IN MOROCCO.

The incidence of syphilis is said to have increased markedly in France since the beginning of the war. This increase in the spread of the disease is of serious consequence in any country, but is more serious for France because of her declining birth-rate. While special means are being adopted to check venereal disease in France, it is recognized that the problem would be of small avail unless suitable precautions were taken in French colonies or dependencies to which troops are sent and where syphilis is rampant. In Morocco it may be said that practically the whole of the indigenous population is infected. It is evident that the danger to French soldiers and other visitors is a real one, and one which needs energetic measures to meet. Dr. Leredde has recently described to the *Société de Médecine de Paris* the means which have been adopted in Morocco by the French authority. The fundamental idea on which the prophylaxis adopted is based is that it is possible to render an infected individual free from danger of conveying the infection to others within a short time by treating him with arseno-benzol. Dr. Leredde speaks of a sterilization of the patient, by which he means a clearing out of the spirochaetes at a time when the infection is still young and the Wassermann reaction has not yet become positive. He admits that it may be difficult or impossible to cure syphilis, if the treatment is begun late, but he claims that even when no cure is effected, the patient can be rendered incapable of transmitting the infection to others by proper treatment. The prophylactic measures adopted for the army include the education of the soldier in recognizing the necessity of early diagnosis and early treatment. Every soldier with a genital affection is required to report himself to the Medical Officer at once. The diagnosis is made in every case in the laboratory. Immediately the spirochaete is found, treatment with arseno-benzol is begun. He uses neo-arseno-benzol, beginning with doses of 0.15 gramme. The injections are repeated after eight days, until the dose of 1.20 grammes is reached. The complement-deviating power of the serum is tested from the first, and is controlled at the end of the course of eight weeks. As the same time the cerebro-spinal fluid is also tested. If both yield a negative result to the Wassermann test, the patient is regarded as sterilized of his syphilis. The evidence in support of this assumption appears to be somewhat weak. It is possible that a patient may be cured of syphilis in from six to eight weeks, if energetic treatment is begun from the first, but few would support Dr. Leredde in sanctioning the marriage of such a patient, without more direct proof of cure than the absence of

a positive Wassermann reaction and the disappearance of manifest syphilitic lesions. For the non-military population the military authorities have instituted a system of dispensary treatment. It appears that the prophylaxis is largely directed toward the prostitute. The co-operation of the whole of the medical profession is sought, in order that no single case of infection may escape detection at an early date. A system of certification has been introduced for prostitutes who have become infected. Necessitous or indigent patients are treated gratuitously at the dispensaries, while private patients under the care of the city practitioners receive the benefit of the aid of the bacteriologist in the laboratory. It is claimed that by the institution of early treatment and by keeping infected prostitutes under efficient control, the danger of the spread of infection in the army is lessened. More stress is laid on this early and energetic treatment with arseno-benzol than on preventive measures in the campaign against syphilis in Morocco. Unfortunately, we are not informed by Dr. Leredde what the frequency of infection in the French Army in Morocco was before the introduction of these measures and after they had been in practice for a reasonable time.

THE AUSTRALIAN ARMY MEDICAL CORPS COMFORTS FUND.

Subscriptions are coming in slowly. The loyal workers at the Australian Army Medical Corps Comforts Depôt are straining every nerve to get the Christmas parcels for the members of the Corps ready for despatch in good time. We appeal to our readers to assist these excellent women in their spendid work.

	£	s.	d.
Amount previously acknowledged	6	6	0
Dr. R. L. Faithfull..	5	5	0
Dr. W. B. Clipsham	1	1	0

Naval and Military.

Since we went to press last week two official casualty lists, Nos. 316 and 317, have been issued. From the former we learn that Captain Carl Oscar Hellstrom has been wounded for the second time, and that Major Harry Caryfort Edmond Donovan is ill. A note is attached, indicating that this is the second occasion, and that Major Donovan is seriously ill. From the latter list we learn that Captain Roy Coupland Winn has been wounded.

* * * * *

In the *Commonwealth of Australia Gazette*, No. 100, of June 28, 1917, it is announced that His Excellency the Governor-General has been pleased to approve of certain commissioned officers being appointed to the Reserve of Officers (temporarily), and being granted honorary rank equivalent to that held by them in the Australian Imperial Force. Among the entries is the following:—

6th Military District.

To be Honorary Captain—

H. M. Brettingham-Moore, D.S.O., late Captain, Australian Imperial Force. Dated 10th July, 1917.

Our attention has been called to an inaccuracy in the list of officers who have been awarded the Military Cross, as published in our issue of June 23, 1917 (page 544). The name Captain Harry Herbert Lee should read Captain Harrie Bertie Lee. Captain Harry Herbert Lee is an officer of the Australian Army Medical Corps Reserve, and resides in Wollongong, New South Wales, while Captain Harrie Bertie Lee, of Collins Street, Melbourne, is a member of the Australian Imperial Force.

News of Men at the Front.

Lieutenant-Colonel W. Kenneth Foy, D.S.O., is acting at present as Deputy Assistant Director of Medical Services to the 2nd Australian Division.

Major A. D. Barton is doing surgical work with the 2nd Australian Casualty Clearing Station. Captain Burkitt is attached to the same unit.

KALYRA SANATORIUM.

The James Brown Memorial Trust, which has control of the Kalyra Sanatorium, Belair, and of "Estcourt House," near The Grange, South Australia, has issued the annual report of these two institutions for the year ending June 30, 1916.

Kalyra Sanatorium.

The Medical Officer of this institution, Dr. J. W. Browne, obtained leave of absence to enable him to proceed to the front, and his place was taken by Dr. William Ray, who is responsible for the medical report. One of the Trustees, Mr. A. M. Simpson, generously provided a new windmill and tank for the purpose of rendering the water supply of the institution an adequate one. During the course of the year 116 patients were admitted to the Sanatorium, while 28 were under treatment on July 1, 1915. One patient died, and one absconded after three days' residence in the Hospital. There were 44 still under treatment at the end of the twelve months, while 99 were discharged. The disease was arrested in 32 cases, and improvement was effected in 29. Dr. Ray distinguishes three classes corresponding to the divisions of a modified Turban classification. Class I. includes those cases in which there is slight disease involving not more than one whole lobe or two half lobes. Class II. includes cases with slight lesions implicating not more than two lobes, or severe lesions implicating not more than one lobe. Class III. includes those cases in which the lesions are more extensive or more severe. There were 44 patients in Class I. The disease was arrested in 29 of them, the condition was improved in 11, and it was not improved in four. The average number of days spent in the Sanatorium by these 44 patients was 115.8. The value of these reports will be greatly enhanced if the medical officer will include in future issues a record of the fate of the patients belonging to the various classes discharged during the previous five years. There were 33 patients in Class II., of whom one died. In three the disease was arrested, in 11 it was improved, and in 18 no improvement was effected. The average length of residence of these patients was 105.1 days. There were 22 patients belonging to Class III. In no instance was the disease arrested, but the condition was improved in seven cases. There were no deaths. The weight of 72 of the 99 patients had increased at the time of discharge. In ten it had remained stationery, and in 17 it had decreased. The average gain was 7.8 lbs., and the maximum was 48 lbs. The youngest patient was 15 years of age. There were 13 between 15 and 20 years, 22 between 21 and 25 years, 32 between 26 and 30 years, and 10 between 31 and 35 years. The oldest patient was 58 years of age, and the average age was 29.9 years.

In dealing with the ætiology of the disease, Dr. Ray points out that pleurisy and pneumonia were the most prominent predisposing diseases. In 62 patients a definite previous illness had been ascertained; in 20 of them this previous disease was pleurisy and in nine it was pneumonia. Of 94 of the newly admitted patients 48 had followed indoor occupations, four had followed underground occupations, and 42 had followed outdoor occupations. Difficulty was experienced in placing with certainty the source of infection in the majority of the patients. A family history of tuberculosis was obtained in 40 cases. Seven of the patients were members of the Commonwealth Military Forces, 52 came from Adelaide and its suburbs, and five from Broken Hill,

The interval between the date of apparent onset of disease and that of admission to the Sanatorium was under one year in 73 patients and over one year in 27. Forty-nine of the patients were admitted within six months of the appearance of the first symptom. The first symptom was cough in 64 cases, pleurisy in 15, hæmoptysis in 10, enlarged glands in three, weakness in three, loss of weight in two, and influenza in two. Hæmoptysis occurred either before or after admission in 44.1% of the patients. The average ratio of chest measurement to height was 0.46 : 1. The normal ratio is given at 0.52 : 1. The diagnosis was confirmed by the finding of tubercle bacilli in the sputum in 81 of the 116 patients admitted. The treatment consisted in rest and graduated exercises in the open air adapted with care to the needs of each individual patient. As the health of the patients improved, outdoor occupation was prescribed both for its effect on the mind and body of the patient and to render them fitter to undertake their usual work on discharge. Inhalation and drugs, etc., were used as subsidiary forms of treatment. The result of this treatment, which has been applied for 11 years has been to arrest the progress of the disease in about 25% at the time of discharge. Unfortunately there is no data concerning the permanence of the arrest.

The cost of maintenance, etc., amounted to £2,908. The income, including patients' fees, the Government grants, and the contribution of the local Board of Health, etc., amounted to £2,572, and the sum was augmented from general income derived from interests and rents. The accounts are not separated from those of "Estcourt House." At the end of the financial year the Trust had a credit balance of £215.

"Estcourt House."

Dr. F. Lucas Benham, the Medical Officer appends a short report on the work accomplished in "Estcourt House." The admissions include three boys, four blind old men, two blind old women and two old women with sight. The health of the boys and girls has been good, but there has been a considerable amount of sickness among the old people. One man, aged 44 years, who had been an inmate for a considerable time, died of pulmonary tuberculosis. One woman, aged 73, who was suffering from paralysis, died, and a woman of eighty died of old age. Four old men and three old women were helpless and confined to bed.

Public Health.

NEW SOUTH WALES.

The following notifications have been received by the Department of Public Health, New South Wales, during the fortnight ending June 23, 1917:—

	Metropolitan Combined District. Cs.	Dths.	Hunter River Combined District. Cs.	Dths.	Rest of State. Cs.	Dths.	Total. Cs.	Dths.
Enteric Fever	13	2	2	0	16	1	31	3
Scarlatina	79	0	2	0	44	0	125	0
Diphtheria	115	1	19	0	171	5	305	5
C'bro-Sp'l Menin.	2	0	0	0	1	0	3	0
*Pul. Tuberculosis	53	17	3	0	0	0	56	17
Malaria	1	0	0	0	0	0	1	0

* Notifiable only in the Metropolitan and Hunter River Districts, and, since October 2, 1916, in the Blue Mountain Shire and Katoomba Municipality.

One case of variola has been notified at Coonabarabran.

VICTORIA.

The following notifications have been received by the Board of Public Health, Victoria, during the fortnight ending June 24, 1917:—

	Metropolitan. Cs.	Dths.	Rest of State. Cs.	Dths.	Total. Cs.	Dths.
Diphtheria	108	2	66	2	174	4
Scarlatina	50	0	27	1	77	1
Enteric Fever	3	0	7	0	10	0
Pulmonary Tuberculosis	24	9	18	4	42	13
C'bro-Spinal Meningitis	2	—	5	—	7	—
Poliomyelitis	1	—	0	—	1	—

QUEENSLAND.

The following notifications have been received by the Department of Public Health, Queensland, during the fortnight ending June 23, 1917:—

Disease.	No. of Cases.
*Diphtheria	55
Pulmonary Tuberculosis	13
Scarlatina	39
Enteric Fever	7
Ankylostomiasis	7
Cerebro-Spinal Meningitis	3
Malaria	3
Erysipelas	1

* One case returned as membranous croup.

SOUTH AUSTRALIA.

The following notifications have been received by the Central Board of Health, Adelaide, for the fortnight ending June 16, 1917:—

	Adelaide. Cs.	Dths.	Rest of State. Cs.	Dths.	Totals. Cs.	Dths.
Diphtheria	4	4	50	1	54	5
Pertussis	0	0	10	2	10	2
Scarlatina	2	0	15	0	17	0
Pulmonary Tuberculosis	1	4	10	16	11	20
Morbilli	1	0	7	0	8	0
Enteric Fever	0	0	5	2	5	2
C'bro-Spinal Meningitis	0	0	3	0	3	0
Erysipelas	2	0	2	0	4	0

WESTERN AUSTRALIA.

The following notifications have been received by the Department of Public Health, Western Australia, during the fortnight ending June 2, 1917:—

	Metropolitan. Cases.	Rest of State. Cases.	Totals. Cases.
Enteric Fever	4	11	15
Diphtheria	26	16	42
Scarlatina	5	3	8
Pulmonary Tuberculosis	11	6	17
Erysipelas	4	0	4
Septicæmia	1	0	1
Bilharzia	1	0	1
Beri Beri	7	1	8

TASMANIA.

The following notifications have been received by the Department of Public Health, Tasmania, during the month ending June 23, 1917:—

Disease.	Hobart. Cases.	Launceston. Cases.	Country. Cases.	Whole State. Cases.
Diphtheria	14	16	31	61
Enteric Fever	4	0	2	6
Pulmonary Tuberculosis	4	1	7	12
Scarlatina	2	0	1	3
C'bro-Spinal Meningitis	1	0	1	2
Puerperal Fever	1	0	1	2

NEW ZEALAND.

The following notifications have been received by the Chief Health Officer, Department of Public Health, Hospitals and Charitable Aid, New Zealand, for the month ending May 31, 1917:—

Disease.	No. of Cases.
Scarlatina	321
Diphtheria	665
Pulmonary Tuberculosis	115
Enteric Fever	41
Cerebro-spinal Meningitis	4
Poliomyelitis	5
Septicæmia	15
Ophthalmia Neonatorum	2
Puerperal Fever	5
Erysipelas	5

Abstracts from Current Medical Literature.

PATHOLOGY.

(1) Microscopical Examination of Sputum.

M. Otani discusses the significance of the epithelial cells and of the saprophytic bacteria found in samples of sputum in the determination of the part of the respiratory passages from which sputum is derived (*Journ. Exper. Medicine*, February, 1917). The sputum is washed to free it from contamination with the secretions of the mouth and pharynx before examination with the microscope. A small piece of sputum is attached to a platinum loop and immersed in a test-tube containing isotonic salt solution. The sputum is washed by stirring the sputum in the salt solution. Occasionally it is necessary to use two lots of salt solution to wash the sputum free from all contaminating micro-organisms. The sputum breaks up into small portions during this process. These portions are used for study beneath the microscope. One portion is examined unstained. Other portions are stained after being spread as a film by pressure between a slide and coverslip. The material may be fixed after drying with methyl or ethyl alcohol. The author recommends the use of borax methylene blue as a general stain. He finds that sputum from the trachea and lungs is always free from non-pathogenic germs. Sputum from the larynx and pharynx contains many kinds of saprophytic microbes. Sputum from above the vocal cords contains nucleated polygonal cells, while sputum from the lungs contains cuboidal cells from the bronchioles or rounded cells, which are twice as large as pus cells, and are formed from the decomposition of cuboidal cells. Ciliated cells of cylindrical form are practically never present in sputum. Pulmonary sputum never contains polygonal nucleated cells, and non-nucleated polygonal cells from the alveoli do not occur. In no case does it contain an abundant number of different species of bacteria. Erythrocytes are always present after pulmonary hæmorrhage. Laryngeal sputum contains polygonal flat cells and many kinds of germs. When erythrocytes are found in laryngeal sputum, hæmorrhage has occurred in the larynx. The author found tubercle bacilli in six out of 150 patients with laryngeal sputum in whom no previous diagnosis of laryngeal tuberculosis had been made. Subsequent examination of these patients confirmed the correctness of the early diagnosis. In acute nasal catarrh the secretion does not contain polygonal flat cells or ciliated columnar epithelium. The secretion resembles that from the lungs. Saprophytic microbes are usually, but not invariably, present. In chronic nasal catarrh polygonal cells are abundant.

(2) Incubation Period of Paratyphoid Fever.

H. E. Roaf (*Journ. Roy. Army Med. Corps*, March, 1917) gives some data bearing on the incubation period of paratyphoid fever. A soldier was admitted to hospital for "dysentery." Examination of the fæces revealed no amœbæ. Plates made from the stools two days after admission grew colonies from which *B. paratyphosus B.* was isolated. The patient was thought to be convalescent from paratyphoid fever, but his blood yielded negative results with serum tests. Twelve days later the temperature of the patient began to rise. Two days later a blood culture was made. *Bacillus paratyphosus B* was isolated from the blood. Eighteen days later the serum reaction of the blood was examined by the microscopical method, and agglutination of *B. paratyphosus B* occurred with a dilution of one in a thousand. The author holds that this case teaches that the *B. paratyphosus B* may be present in the intestines for at least twelve days before the onset of the fever, and that patients who develope the disease in hospital are not necessarily infected in hospital.

(3) Cultivation of Trichomonas.

T. Ohira and H. Noguchi have cultivated *Tetratrichomonas hominis* from the human mouth (*Journ. Exper. Medicine*, February, 1917). The trichomonas were obtained from the tartar around the teeth. Many culture media were tried. The most suitable medium was a mixture of equal parts of ascitic fluid and Ringer's solution. The inoculated tubes were incubated at 37° C. The flagellates multiply in the sediment at the bottom of the tubes. To accelerate the rate of multiplication a little of the sediment is transferred by a glass capillary tube to a fresh lot of culture medium every twenty-four hours. If this is not done the flagellates soon die. Twenty generations have been grown, but sooner or later the organisms have died out. The body of this flagellate is pear-shaped, but highly flexible. The size varies from 10μ to 15μ in length, and from 4μ to 8μ in width. Sometimes large forms, 25μ long and 12μ wide, occur. The flagella at the anterior end are uniformly four in number, radiating from a basal granule. They are unequal in length. An undulating membrane arising from a blepharoblast is present. The axostyle takes its origin from the end of the spindle-shaped nucleus. The axostyle projects beyond the posterior margin. The nucleus is single, with one distinct karyosome. The protoplasm is not differentiated into ectoplasm and endoplasm. No contractile vacuole could be found, and no chromidial apparatus is present. The common method of reproduction is binary longitudinal fission, but multiple fission or budding may occur. In one instance six daughter cells were formed which did not separate at the same time, but budded off one after the other. The division of the blepharoblast is of the mitotic type, while that of the nucleus is premitotic. No form that could be regarded as a cyst was observed in any culture.

(4) Hypertrophy of the Heart.

T. F. Cotton has examined the weights of the ventricles of a large series of hearts, has determined the preponderance of right or left ventricular hypertrophy, and has compared these weights with the signs of cardiac enlargement and, where possible, with electro-cardiographic records (*Heart*, January, 1917). To obtain the separate weights of the ventricles he has followed the method employed by Lewis. The author has examined the separate ventricular weights of 51 hearts in a series of patients who had been under his observation during life. In the present paper he considers only the relative amount of left or right ventricular hypertrophy under different conditions. In a series of 13 control hearts the relative weights of the two chambers was 1.82. In three cases of mitral stenosis the L/R ratio was 1.25, showing a right-sided hypertrophy. In two cases of aortic disease the hypertrophy was on the left side and the ratios L/R were 3.4 and 4.9. In a group of 17 cases of interstitial nephritis the average ratio L/R was 2.0, showing slight left-sided preponderance. The hypertrophy was more on the left side in eight hearts and on the right in nine hearts. Taking all the cases of renal disease and selecting those with high blood pressure, no influence of high pressure on the production of hypertrophy could be shown. The author considers that the electrocardiac signs may be useful in determining left and right ventricular hypertrophy during life.

PÆDIATRICS.

(5) Milk Coagulation in the Human Stomach.

With the assistance of a healthy individual, able to reject his stomach contents practically at will, Brennemann (*Archives Paediatrics*, February, 1917) carried out a series of experiments on the coagulation of milk in the human stomach and on the digestion of milk, diluted in various ways, and of various milk foods. According to his experiments raw milk began to coagulate in the stomach within a few minutes. The small curds formed at first, coalesced with one another and formed larger, evidently conglomerate and often bizarre-shaped masses. The largest curds were quite regularly formed after about two hours, when they were often ten to twelve centimetres long. They then became smaller owing to peripheral digestive liquefaction. The curds were soft at first, and became progressively harder, a characteristic of all milk curds. They did not soften and disintegrate in the process of digestion, but became harder, and all digestion took place at the periphery. Even after five hours, hard curds were still found quite regularly in the stomach. Mucus was found very abundantly, especially after the first half hour. The curds were

slippery and covered with mucus, and more or less bound together by it. After the first half-hour, and especially from one hour on, there were always present masses of tangled, feathery mucus, holding in its meshes fine milky particles. When placed in water these floated, forming fine filmy lines, radiating away from the curds to which they were firmly attached. At the end of half an hour the stomach contents were neither offensive nor bitter. After one hour, and even more marked after two or more hours, they had a very offensive, "sour," fatty, acid odour, and there was present the bitter taste of peptones. But at five hours the taste was said to be both "bitter" and "sour, as after taking vinegar," probably due to the return of free hydrochloric acid. In the experiments up to and including one hour after ingestion of the milk, the returned fluid was manifestly largely composed of clear, straw-coloured whey. After that the fluid was greyish and turbid. In boiled milk the general course of events was identical with that of raw milk. The whey was, however, less definitely separated from the curd, and the latter was very much finer and softer. Instead of large rubber-like masses, there appeared fine, soft, indefinite curds, easily friable, like a good custard, and at no time, even at the two-hour period, of maximum size, larger than a good-sized bean. Pasteurized milk acted like raw milk, but had a slightly smaller curd. Again, while the curds were hard and large in proportion as the fat content of the milk was small, the curd of cream, while small, soft and friable, was, nevertheless, the most resistant to the action of the gastric juice. The whole mass of milk stayed in the stomach longer, and was less changed or diminished in quantity the richer it was in fat. It was also difficult to take a large amount of cream and even harder to retain it. When the milk was sipped slowly, the newly formed curds tended to coalesce with the ultimate formation of one large curd mass, leaving no discernible line of union. The action of alkalies and of salts like sodium citrate on casein coagulation in the stomach was not quite clear. In the case of alkalies like magnesium hydroxide, or sodium bicarbonate, the predominating action is probably one of neutralization of the hydrochloric acid, that is necessary for rennin coagulation. The neutralization of other acids in the stomach, as well as of the lactic acid of the milk itself, probably also plays a part. Sodium citrate, however, is supposed to act primarily on the lime salts of the milk and only secondarily as a weak antacid. Coagulation is, therefore, delayed and altered. The more active the alkali, *i.e.*, the greater its neutralizing power, the greater the effect on casein coagulation. Taken in sufficient amounts alkalies and sodium salts may stop coagulation completely. Re-coagulated and acidified milks showed very little tendency to re-coagulation, or to increase in the size of the curds by coalescence. The curds appeared as fine, flocculent, floating, soft masses, with perhaps a few hard curds present. Dried and condensed milks as a rule formed a minimum curd. Starch concoctions, such as barley water, very radically influenced the coagulation of milk in the stomach, and the curd was much smaller than when there was a simple, watery dilution. The soluble carbohydrates, dextrins, milk sugar, cane sugar and maltose had no appreciable effect on milk coagulation. Mellin's food, however, though consisting of 80% soluble carbohydrate, had a markedly beneficial effect on milk coagulation. This was probably due to the presence in the food of a comparatively high percentage of salts, equivalent in the mixed food to about one gramme of citrate of soda to half a litre. When milk was diluted with water only, the curd was found to be finer, flakier and more porous, the greater the dilution.

(6) Hypertension in Nephritis in Childhood.

From a study of blood pressure observations in 93 cases of nephritis in children between the ages of 2 and 12, Berkley and Lee (*Amer. Journ. of Diseases of Children*, April, 1917) make the following deductions:—(1) The blood pressure is elevated in the nephritis of childhood, and occasionally to a marked degree. This applies to both acute and chronic nephritis. (2) Systolic and diastolic pressures are not increased to the same degree, the former averaging about 20 mm. of mercury, and the latter about 10 mm. above normal. (3) The pulse pressure is increased, but the factor is not constant. (4) The blood pressure in chronic nephritis shows no constant elevation above that of acute nephritis. (5) The blood pressure may, in rare instances, be of prognostic value. (6) No relation has been found to exist between the blood pressure and the urinary findings. (7) Patients having marked œdema showed a slightly higher average blood pressure than those with little or none. The difference was not great enough to warrant definite conclusions. (8) Albuminuric retinitis is probably not common, even in cases showing a marked increase in blood pressure.

(7) Congenital Radio-Ulnar Synostosis.

David M. Greig records two cases of congenital superior radio-ulnar synostosis, which he regards as a relatively rare condition (*Edin. Med. Journ.*, April, 1917). The first patient was a lad, aged 19 years, who had been unable to supinate his forearms since birth. His facies had somewhat the Mongolian type, but the cranium was well formed and the occiput was not flat. He was intelligent, and an average scholar. The forearms, when flexed at the elbow, had their radial borders directed upwards, and the ulnar borders downwards. There was absolutely no pronation or supination. The head of the radius could not be felt. In the radiogram it was seen that there was fusion between the radius and ulna in the upper 4 cm., while antero-posteriorly the outline of the humerus in the joint appeared to be normal. The second patient was a boy, aged four years. His mother insisted that her period of gestation had lasted ten months. The birth had been normal, but a fit had occurred in the infant shortly after birth. He was late in walking, and very late in talking, and was obviously mentally defective. There was some paresis of the left *orbicularis oris* and some facial paralysis on the left side. The left pinna was smaller, and the concha was larger than on the right side. The patient did not seem to use his left leg as he did his right. A radiogram showed fusion at the upper extremity of the radius and ulna, while the lower radio-ulnar articulations appeared to be normal. The author regards the fusion as essentially an arrest of development. It is not exactly a fusion of the proximal epiphysis, but is a want of the splitting of the original mass into two parts which form the superior radio-ulnar joint. An attempt is made to provide the lost movement by a rotation of the humerus, but the defect remains one of considerable embarrassment to its possessor. Owing to the mental deficiency of the second patient, no attempt was made to remedy the defect. The author endeavoured to divide the radius from the ulna in the elder boy, prior to further operative treatment. He found that it was exceedingly difficult to get the fracture to occur in the line he wished, and consequently determined to leave the limbs alone.

(8) Communicability of Poliomyelitis.

From a study of records relating to the permanent inmates in children's homes and from a personal investigation into every case of poliomyelitis occurring in any isolated community in one certain area, Kerley (*Archives of Pediatrics*, January, 1917) came to definite conclusions as to the communicability of, and susceptibility to, poliomyelitis. In 93 institutions, representing 21,746 children, but ten proved cases of this disease developed. Three of these developed in less than two weeks after admission, three others had mingled with other children in a common playground. In none of the localities included in the isolated area under investigation had the disease been known to exist within a period of ten years. In each case in the area a definite history of contact with a case of poliomyelitis was obtained, or it was the only case of the disease in the locality. From these facts the author concludes that: (1) poliomyelitis may be communicated through personal contact; (2) these are innocent carriers who spread poliomyelitis; (3) only a small percentage of children are susceptible to the disease. Probably 90%-95% of children possess immunity.

British Medical Association News.

SCIENTIFIC.

A meeting of the Western Australian Branch was held at the Perth Public Hospital on April 18, 1917, Dr. J. K. Crouch, the President, in the chair.

Dr. J. J. Holland exhibited two cases of *myxœdema*. In both cases marked improvement had been noted after treatment with thyroid extract and hormatone.

Dr. Holland also showed a patient with a peculiar swelling of the leg over the front of the left tibia. The condition was probably a *lymphangioma* in which the bone had become eroded in some parts and stimulated to growth in others.

Dr. M. K. Moss demonstrated an apparatus which he had designed for administering *warm anæsthetics*. The anæsthetic was blown through a rubber tube inside a *thermos* flask filled with warm water by means of foot bellows. Either ether or chloroform could be administered. He stated that he had used the apparatus on the afternoon of that day at an operation which had lasted for four and a half hours. The patient had left the table with a good colour, and had exhibited very little evidence of shock.

Dr. G. W. Barker exhibited a heart from a patient who was supposed to have died from septic abortion. There was marked *ulcerative endocarditis*. At the post-mortem examination no signs of pregnancy had been detected in the uterus, and there was no trace of a *corpus luteum* in the ovaries.

Dr. Barker also exhibited a stomach from a case of *pyloric cancer*. The growth had constricted the opening to such an extent that a match was passed through it with difficulty after death. The patient had not complained of any gastric disturbance until three weeks before the operation.

Dr. Barker then exhibited the brain of a patient who had been admitted into hospital as a lunatic. Post-mortem a large *tumour* had been found *pressing on the cerebellum*, though not actually invading it.

Dr. C. Joyce read a paper, entitled, "Extracts from a General Practitioner's Note Book." (The text of this paper will be found on page 1 of the present issue.)

A discussion followed. Dr. W. Trethowan tendered a hearty vote of thanks to Dr. Joyce, not only for the trouble he had taken in compiling the paper, but also for having travelled from the country to Perth, at great personal inconvenience, to deliver it. He would like to see more of the country members follow Dr. Joyce's example. This would bring the country members in closer touch with the city men.

The Honorary Secretary read a letter from Dr. C. G. Thorp, of Onslow, containing the report of a case of *granuloma pudendi*, and describing the treatment of this condition with intramuscular injections of antimony and local application of mercury ointment. (The record is printed on page 4 of this issue.)

A meeting of the New South Wales Branch was held on June 8, 1917, at the B.M.A. Building, 30-34 Elizabeth Street, Sydney, Dr. R. Gordon Craig, the President, in the chair.

Dr. H. M. Moran read the notes on a case of *embryoma testis*, the text of which is published on page 5.

Dr. P. E. Walton Smith reported a case of *colitis polyposa*, and exhibited a specimen consisting of a large intestine (see page 6).

Dr. M. O'Gorman Hughes stated that when he saw the patient the condition was quite desperate. It had been shown that drugs were of no use. There was a complete stricture of the bowel 3.3 cm. (2½ in.) above the anus. The impression obtained from the clinical aspect of the stricture was that it might have been syphilitic. The patient denied having been infected, and the Wassermann test was negative. The stricture was dilated under an anæsthetic, when it was found that numerous polypi were present. One of these was removed, and was sent to Dr. Walton Smith for examination. Dr. Walton Smith had described the result of this examination. The patient's condition was apparently unaltered by the dilatation of the stricture. After a time the clinical picture suddenly changed. The patient became feverish and acutely ill. There was tenderness over the liver, but no fluid was obtained on puncturing. Dr. O'Gorman Hughes raised the question of the proper treatment for this condition. He suggested that a complete colectomy might have been performed. In this event he would be inclined to carry out as a preliminary step an inguinal colostomy on the right side.

Dr. R. Gordon Craig referred to a case which he had had under his care some years before. There was a diffuse cellulitis of the left groin, with marked distension. An opening was made, and gas and fæces escaped. A tube was immediately inserted. The patient improved for a short time, but eventually died. The post-mortem examination was carried out by Dr. Litchfield, who had found a condition of *colitis polyposa*. A perforation was found in the descending colon, immediately above a ring cancer. There were numerous polypi from the splenic flexure as far as the stricture. Dr. Craig pointed out that both in his case and in Dr. Walton Smith's case there had been obstruction of the bowel. He had thought at the time that the polypoid condition had preceded the cancer, but he was inclined to raise the question whether the obstruction had not given rise to the growth of polypi. He suggested that the chronic irritation might have led to hypertrophy of the mucous membrane.

Dr. W. F. Litchfield pointed out that in the case referred to by Dr. Craig the polypi extended only a small distance above the stricture. The polypi were adenomatous in character. He suggested that one of these polypi had undergone malignant degeneration. He considered that the parallelism between the two cases was not marked. He understood that in Dr. Walton Smith's case the polypi were not adenomatous.

In his reply, Dr. Walton Smith stated that there were about 40 cases on record, and in about one-half of them the polypoid condition was associated with malignant disease. It had been described as a congenital condition in some cases. His own case was obviously quite distinct from the usual condition spoken of *colitis polyposa*.

Dr. J. Morton described a case of *obstruction at the ileo-cæcal junction, due to the impaction of whole, dried pease*. The history of the case was as follows: The patient, a boy, aged 10 years, complained of pain and a lump in the right side of the abdomen. He had vomited eight times. There had been some diarrhœa after a dose of castor oil. On examination, a tender swelling was felt in the right iliac fossa. There was no rigidity. The temperature was 37.7° C., and the pulse-rate 90. The diagnosis made was appendicitis. An operation was performed, at which it was found that the last five or six inches of ileum were packed with pease. The mass was hardest at the ileo-cæcal valve. The pease were evacuated through a small incision in the valve. On the following day the patient felt quite well, and he was able to leave the hospital 16 days after the operation.

Dr. J. Morton also exhibited *a cage for uterine dilatation and drainage*. The cage, which was constructed of an open mesh wire, had a slight curve to prevent the end from impinging on the posterior vaginal wall. It was open at both ends, to admit of gauze packing. He pointed out that the ordinary methods of dilatation were not satisfactory, inasmuch as they were not permanent. He had satisfied himself that the cage could be left in position without any risk, and while in position would allow of free drainage. In dysmenorrhœa in young girls and young married women he employed Hegar's dilators up to No. 10 or No. 13, to enable him to pass the cage into the cervix. He used the conical graduated Hegar's dilators. Before dilating the cervix the vagina was swabbed out with tincture of iodine. After the cage had been inserted, a strip of iodoform gauze dipped in tincture of iodine was packed into the uterus through the cage. This was left in for 24 hours to stop bleeding and the formation of clots. After the removal of the gauze he employed gentle vaginal douches every day. Dr. Morton stated that it was usual in his experience to find retention of lochia in sapræmia following child-birth. The use of his cage did away with the necessity of giving repeated intra-uterine douches. He held that it must be

unusual to get bacterial infection when there was no retention of putrescible material. He considered that early drainage was of great value, and suggested that the cage should be applied as soon as the temperature started to rise. It could do no harm, and almost invariably did good. He spoke of the use of the cage following Cæsarean section. In two cases there was retention, causing trouble. In one he had applied his cage with the happiest results.

Dr. M. O'Gorman Hughes stated that he had seen the use of a rubber tube introduced as a drain into the uterus followed by a rise of temperature and thrombosis of the femoral vein.

Dr. J. C. Windeyer questioned whether "cage" was a good name for the instrument Dr. Morton had exhibited. He was of opinion that retention in septic or sapræmic conditions was not due to obstruction at the cervix, but was caused by the slack condition of the uterine body. He had frequently used a rectal tube with a gauze drain for establishing drainage from the uterus. He believed that this method was first described by Hill. The uterus was washed out with a 25% solution of alcohol. The patients had done remarkably well. He had tried eusol in the place of alcohol, but up to the present had not observed any advantages. In explaining the action of this method, he suggested that the gauze drain pushed up into the body of the uterus acted as a foreign body, and caused the uterine muscle to contract on it. He was disinclined to put a foreign body into a clean uterus in cases of dysmenorrhœa.

Dr. R. Gordon Craig raised the question whether, in using Hegar's dilators, there was not some risk of driving the septic contents of the uterus through the Fallopian tubes into the peritoneum. He suggested that the uterus was a closed cavity, and therefore the dilator would act like the piston of a syringe. He spoke of a form of metal dilator in which there was a minute canal in its centre. He considered that it was necessary to be careful in leaving a metal body in any muscular cavity. There was always the possibility of local necrosis and of septic invasion. He suggested that Dr. Morton's cage might be a good means of applying Wright's salt pack. The good effected in this way might even outweigh the theoretical objections.

In his reply Dr. Morton compared a rubber drainage tube with his cage, and pointed out that the former failed to effect efficient drainage because its walls were in contact with the discharging surface. He regarded Carrel's work as of first-class importance. By passing the tube to the bottom of the cavity and pressing the fluid up, he had transformed the rubber tube into a real drainage tube. In reply to Dr. Windeyer, he stated that he had definite evidence of real retention of lochia in sapræmia. He had seen the swelling of the cervical endometrium occluding the passage. He differed from Dr. Craig in regard to a metal dilator acting like a piston. In septic processes the cervix was soft and easily expanded, and the dilator, in advancing up the uterus, did not push in front of it any secretion present. He had not any evidence that his cage acted as a foreign body.

Dr. J. Morton next described a *silkworm gut suture for abdominal incisions*. He had found this suture useful in the ordinary supra-pubic mid-line incision. After the peritoneum had been sutured with catgut, a strong silkworm gut suture was introduced through the skin at one end of the wound. It was then used as a continuous mattress suture for the aponeurosis as far as the opposite end of the wound, and was brought out again through the skin. A second silkworm gut suture was then passed in a similar way, so that the wide loops of the mattress suture were opposite to those of the first strand. When the skin suture was completed the silkworm gut was tightened and tied over a pledget of gauze at each end of the incision. The suture could be left in as long as was necessary, and could be removed without difficulty. He always left these sutures in for three weeks, and often longer. The advantages of the suture were dependent on its oblique direction. It did not tend to cut out. He had found that this suture guarded against a possible opening up of the wound, and had the advantage over chromic gut that it is was easily removable.

Dr. O'Gorman Hughes stated that he regarded Dr. Morton's suture as a very excellent one. There was very little tension, and very little tendency to cut through. He thought that it was unlikely to give rise to stitch abscess.

Dr. C. E. Corlette said that he intended to try this method of suturing. In his experience there was no difficulty in removing stout figure-of-eight catgut sutures, although there was some difficulty when fine gut was used. He agreed with Dr. Morton in regard to the disadvantages of chromic gut. Although this material was supposed to be absorbed in from ten to fourteen days, samples varied very considerably, and they occasionally bought sutures which would last from ten to fourteen years.

Dr. J. C. Windeyer congratulated Dr. Morton on his ingenious method of suturing. He recognized that there would be no tendency for the suture to cut out.

Dr. R. Gordon Craig considered that Dr. Morton's suture was excellent on paper. He would not wish to express an opinion on it as a practical method until he had tried it. He dealt with the figure-of-eight suture as he used it, and stated that it was only difficulty to remove when the suture was divided and the attempt followed at once to get it out. On the following day the surgeon should experience no difficulty in removing the suture.

Dr. Morton, in replying, stated that he had found that the ordinary figure-of-eight suture could not be removed easily in every case.

Dr. F. Guy Griffiths read a note on a case of *wide propagation of a cardiac murmur*, and exhibited the little patient (see page 8).

Dr. R. Gordon Craig said that he was reminded of a case he had dealt with some time previously. The patient was a blue child, and was running about without any obvious distress. A murmur was heard in every situation in the body. He listened for it, and heard it at the vertex, but had not listened over the sacrum. He raised the question whether the unusual propagation of the murmur might not have been due to some pericardial adhesions binding the heart to the vertebral column and conducting the sounds to all parts of the body.

Dr. Guy Griffiths did not think that there was any pericarditis in his case. A chronic mesial pericarditis was certainly not present; moreover, in those cases of chronic mesial pericarditis which had been observed carefully, there was no wide propagation of murmurs.

MEDICO-POLITICAL.

A meeting of the Victorian Branch was held at the Medical Society Hall, East Melbourne, on June 6, 1917, Professor R. J. A. Berry, the President, in the chair.

The President announced that it was his painful duty to inform the members that his predecessor, Colonel Andrew Honman, had lost his son during the past few days. He had been killed in action. He moved that a message of condolence be sent to Colonel Honman expressing the sympathy of the Branch on the loss he had sustained.

Dr. J. W. Dunbar Hooper seconded the motion, which was carried unanimously, the members rising from their seats out of respect for the dead.

Trade Advertisement.

Dr. Alex. Lewers moved an amendment of the regulations of the Branch dealing with trade advertisements, to the following effect:—

> That Regulations 1 and 2 under "Trade Advertisements" be amended as follows:—After the words "No member engaged in medical practice" insert "or who holds a salaried position by virtue of a medical or surgical qualification."

The regulations referred to had been adopted at a meeting of the Branch held in 1915, as follows:—

Trade Advertisements.

1. No member engaged in medical practice shall give any report for publication upon any medical or surgical appliance or any drug or medicinal preparation or any substance capable of being advertised as possessing therapeutic properties to any proprietor or distributor or vendor thereof.

2. No member engaged in medical practice shall sanction the quotation of any extract from any publication by him dealing with any medical or surgical subject for the purpose of a trade advertisement.

The reasons for asking for an amendment of these regulations were twofold. The first was the uncertainty of the meaning of the words "engaged in medical practice." When these words were called in question, acute differences of opinion had arisen as to what they meant. The majority of the members of the Council held that they applied only to practitioners taking fees. He dissented entirely from that view. He contended that they should mean anyone employing a medical or surgical qualification as a means of livelihood. Such practitioners were in active competition with every other member of the profession, because they were keeping some other member of the profession out of the position which they then held. Some members preferred to hold salaried positions to earning fees. If the profession became nationalized, under the reading at present adopted, two thirds of the members could not be regarded as being engaged in medical practice. It was contended that these regulations had been framed to prevent members from obtaining undue prominence by having their names brought before the public, and that no salaried man could be so benefited. Dr. Lewers stated that "material advantage" was hard to prove. It was suspicion of advantage that should be guarded against, and that suspicion applied as much to the one class of practitioners as to the other. It was objected that if these rules were altered, certain members of the profession who made analyses of proprietary articles and wrote reports, would be debarred from giving these reports. He held that reports were not testimonials. They might be made so, but then they became objectionable and liable to penalty. The objection, however, upon which he relied chiefly was that these regulations differentiated between members of the British Medical Association. To his mind, that was entirely undesirable. The regulations imposed a certain line of conduct on one set of members, and allowed other members to do as they wished. If the Branch was going to permit regulations to differentiate among members, he had no hesitation in saying that the first time any real strain was put on them, the Victorian Branch would tumble like a house of cards. The object of the amendment was to make the regulations apply equally to all members of the Victorian Branch, that is, to every member relying on his qualification for the earning of his livelihood.

Dr. Allan Robertson seconded the motion.

Dr. A. Norman McArthur said that he saw one difficulty, and that was that a man occupying a public position might be prevented from expressing an opinion in regard to a matter of public moment. The idea underlying the original regulations was that there should be no competition between the men who were endeavouring to earn a living by fees. Medical practitioners in public positions were engaged at a definite and fixed annual payment, which could not be altered by the effect of a public advertisement. The public looked to men holding these positions for opinions on public matters. These men could not be regarded as competing with private practitioners.

Dr. F. L. Davis contended that a public notice in the newspapers did help to increase the amount of the annual payment to medical men holding public positions. These men might be called as expert witnesses in courts of law and in arbitration courts, and in this way they would enter into active competition with private practitioners.

Dr. R. J. Bull said that he did not understand the object of the amendment. If the idea was an attempt to silence men who occupied public positions and who were also in active private practice, it would be wise to prevent them from entering into competition with other practitioners because of the license which permitted them to advertise. A man in a public position might be called upon to give expert evidence in a court of law, in virtue of his position. He would not come into conflict with private practitioners, because he would not be chosen to give evidence unless he were an expert.

Dr. Jas. Booth said that while he sympathized with the motion, he felt that there was justice in Dr. McArthur's contention that a man in a public position was better qualified to give an expert opinion in some cases than a private practitioner. If the regulations were amended, as suggested by Dr. Lewers, he would be debarred from giving any opinion when called on.

Dr. Lewers said that the whole object of the regulations was to prevent anything undesirable from happening. As no one could foretell when anything undersirable might happen, it was necessary to begin at the beginning in an endeavour to meet every eventuality. If testimonials were allowed at all, they would have to face the difficulty of determining which testimonials should be allowed, and which should not be allowed. He advocated that there should be no differentiation whatever among the members of the Branch in regard to the right to furnish any statement that might be considered undesirable under the regulations.

The motion was carried by a large majority.

A meeting of the Queensland Branch was held on June 1, 1917, at the B.M.A. Rooms, Adelaide Street, Brisbane, Dr. W. N. Robertson, the President, in the chair.

Announcements in Daily Press.

Dr. A. C. F. Halford referred to the question of dealing with announcements in the daily press of commencement of practice, etc., which had been deferred from the meeting of May 4, 1917 (see *The Medical Journal of Australia*, June 2, 1917, page 477). He moved that the matter be referred to the Council.

Dr. J. Lockhart Gibson seconded the motion, which was carried.

Public Morality Association.

Dr. J. Lockhart Gibson said that the question of public morality was a most important one. He was in favour of a circular being drawn up, printed, and sent by teachers to the parents of the scholars. He urged the Branch to appoint delegates, as requested by the Council of the Public Morality Association, for this purpose. He nominated Dr. E. W. Kerr Scott and Dr. W. N. Robertson, and Dr. T. H. R. Mathewson nominated Dr. W. F. Taylor. It was agreed that the members nominated should act as the delegates of the Queensland Branch.

Country Hospitals.

Dr. W. N. Robertson informed meeting of the bad condition existing at certain country hospitals, and asked the members to appoint a sub-committe to deal with this matter.

Dr. L. M. McKillop said he was glad to hear that the Council had taken this matter up.

It was resolved that a sub-committee be appointed. Dr. L. M. McKillop, Dr. A. C. F. Halford and Dr. C. A. Thelander were elected members of the sub-committee.

Anti-Shouting.

Dr. W. N. Robertson called attention to a circular which had been received from the National Council of Women relating to a petition in support of the "anti-shouting campaign." He invited members to sign the petition.

The following have been elected members of the New South Wales Branch:—

P. A. C. Davenport, M.B., Ch.M., 1914, Univ. Sydney, "Orme," Darling Point, Sydney.

F. J. Graham, L.M., L.R.C.P., Irel., 1910, L.M., L.R.C.S., Irel., 1910, Hornsby, N.S.W.

Harvey Nickoll, L.R.C.P., Edin., 1883, L.R.C.S., Edin., 1883, Mudgee, N.S.W.

O. Robertson, M.B., 1917, Univ. Sydney, Sydney Hospital, N.S.W.

H. E. Clarke, L.R.C.P., Irel., 1912, L.R.C.S., L.M.R.C.S., Irel., 1912, Manly, N.S.W.

E. J. Rowbotham, M.R.C.S. Eng., L.R.C.P. Lond., 1894, Carleton Hotel, Sydney, N.S.W.

Special Correspondence.

(By Our Special Correspondent.)

LONDON LETTER.

The Criminal Law Amendment Act, 1917.

The Home Secretary's Bill for the amendment of the Criminal Law is a welcome step in the right direction,

Its principal provisions aim at checking the dissemination of venereal disease, and it is assuredly satisfactory that the reckless communication of specific maladies should be recognized by the law as a punishable offence. Under Clause 2 of the Bill, any person suffering from venereal disease in a communicable form is forbidden to have sexual intercourse with any other person, the penalty on indictment being two years' imprisonment with or without hard labour, or, on summary conviction, to imprisonment with or without hard labour for a term not exceeding six months.

The Court may order a medical examination, and a woman may have the privilege of a female doctor. Conviction will not follow if a prisoner proves that he or she had reasonable grounds to believe that they were free from the disease at the time the offence was committed.

When a person has within three months before the commission of any alleged offence received a written notice, either on an examination ordered under the section or while under compulsory detention in any prison or other institution, from a duly qualified medical practitioner that he or she is suffering from venereal disease in a communicable form, that person shall be deemed to have been so suffering at the time when the offence was committed unless the contrary is proved.

Indecency with girls under sixteen will be punishable with two years' imprisonment on indictment, or six months on summary conviction, consent being immaterial; and reasonable cause to believe that a girl was above that age will not be a defence to a charge under the principal Act, the provisos of which under the section concerned are repealed.

The penalties for keeping a disorderly house are:—

On first conviction, fine of £100 or three months.
Second conviction, fine of £250 or six months.
Third or subsequent conviction, £500 or twelve months.

Upon a second or subsequent conviction the offender will have to enter into sureties to be of good behaviour for twelve months or undergo an additional three months' imprisonment.

The power to impose a penalty for loitering or soliciting on a person already convicted of a similar offence is extended to enable magistrates to award a month's imprisonment.

The Indecent Advertisements' Act, 1889, is extended so as to punish (a) a person who publishes, by way of advertisement, or causes to be published, any picture or printed or written matter which is of an indecent or obscene nature; (b) a person who gives or delivers to any other person any such picture or printed or written matter with intent that the same should be published by way of advertisement.

The penalty in each case is £100 or six months, instead of 40s. and one month and £5 and three months, as at present.

Any advertisement relating to syphilis, gonorrhœa, nervous debility or other complaint or infirmity arising from or relating to sexual intercourse, and any advertisement which suggests, directly or indirectly, the use or taking of any appliance, drug, substance or thing for the purpose of procuring miscarriage or abortion, or which suggests, directly or indirectly, that any premises are or can be used for immoral purposes, will be deemed to be printed or written matter of an indecent nature.

The Act will not apply, however, to any advertisement by any local or public authority or to any advertisement published in any *bona fide* medical or pharmaceutical publication or pharmaceutical trade list.

The Health of England and Wales During 1915.

The Medical Officer of the Local Government Board, in his review of the public health of England and Wales for the year ending March 31, 1916, thus sums up his report:—

> So far as infectious diseases are concerned, with the single exception of measles, the record of 1915, like that of 1914, has remained favourable. Smallpox hitherto has failed to gain more than a temporary footing in any district. Dysentery, notwithstanding the return to this country of many soldiers recovering from this contagious and relapsing disease, has not spread. Both in the civil and the military population typhus has failed to spread; and the amount of enteric fever has been so small as to inspire fresh hope that this disease, like typhus already, will ere long count among the almost extinct diseases of this country. There have been no cases of plague or cholera. Cerebro-spinal fever in 1915 showed much activity; and special work was undertaken, both military and civil, to control its spread and to investigate its natural history, in the hope that more complete knowledge would furnish aditional guidance in preventing its occurrence. Acute anterior poliomyelitis, which has recently been very prevalent in New York, occurred in sporadic fashion in this country during 1915. The tuberculosis work of local authorities has been greatly restricted by the war, and one of the most urgent of after-war problems will be to secure the early resumption and extension of this work, particularly in regard to the provision of greatly increased accommodation for advanced cases of consumption. There is in active preparation a national scheme for the diagnosis and treatment of venereal diseases, which promises to be among the most successful public health work of the early future.
>
> Public health work is not restricted to the control of diseases communicable by infection. It embraces all measures, whether of prevention or of treatment, which will diminish or curtail the duration of disease, or which will raise the standard of health of each member of the community. The war has had the effect of directing greatly increased attention to means for improving the health of mothers and of their children during the first five years of life. During 1915, work with this object has been much increased, though some local authorities still remain inert, and appear to be unwilling to realize that the truest national economy can only be secured by saving life and improving health by all practicable means. The need for increased effort to save child life is shown by the markedly lower natural increase of population in 1915 than in 1914. In the year 1914 there were 362,354 more births than deaths in England and Wales. In the year 1915 this excess of births over deaths was only 252,201. There were 64,569 fewer births, and 45,584 more deaths in 1915 than in 1914. Much of the increase in mortality in 1915 was caused by measles and by bronchitis; and it is satisfactory to note that the Board's recent order for the notification of measles places it in the power of sanitary authorities to prevent a large proportion of the deaths from this disease, even though they may not succeed in preventing its spread. The reduction in the number of births emphasizes the importance of saving child life and of improving the health of all survivors. There is no insuperable difficulty in reducing the total deaths in childhood to one-half their present number. In 1915, 98,477 infants died in their first year after birth, and 55,607 died at ages 1 to 5.

Correspondence.

THE REFERENDUM.

Sir,—Is not the action of the B.M.A. Federal Committee rather premature in seeking compulsory enlistment of the Medical Profession in Australia?

If general conscription be brought in for the civil population, by all means let it cover our professional services, but until that compulsion is made law for the "man in the street," why should our profession be singled out?

I am heartily in favour of general conscription (including that of our own calling) for the needs of our country, but let the pressure be put on all classes, not on the one only.

Yours, etc.,
W. H. BURTON,

Belmont House, Malvern Road, "Gardiner,"
Melbourne, June 27, 1917.

PROFESSOR BERRY ON CORRELATION OF INCREASE IN SIZE OF BRAIN AND OF INTELLIGENCE.

Sir,—While the average mass of brains at different ages may be no guide to intelligence, the increase of one brain may. If in a brain weighing 10 the elements concerned in intelligence may equal 1, and the brain may increase to 15, and the intelligence elements to 1.5. In another brain, weighing 9 the intelligence elements may equal 0.8. An increase of brain to 12, and of intelligence elements to 1.06. This would allow for the increase of the non-intelligence elements of the brain, and would substantiate Professor Berry's argument.

Brain mass need not always contain the same proportion of intelligence elements, so that correlation of brain-mass measurement and intelligence may not exist, though brain-mass increase and intelligence increase may be correlated.

Have any investigations been made as to increase of brain measurements at ages from 6 to 21?

Yours, etc.,

Melbourne, June 25, 1917. P.

Medical Appointments.

Dr. Edith Barrett has been appointed a Member of the Advisory Committee of the School of Domestic Arts, South Melbourne, Victoria, for the period ending June 30, 1920.

Dr. Alexander Matheson Morgan has been appointed a Member of the State Children's Council, South Australia, Dr. Hamilton having resigned.

Under the provisions of Section 36 of "The Public Service Act, 1916," Dr. Henry Charles Cadell Rennie has been appointed Resident Medical Officer at the Sanitorium for Consumptives at Bedford Park, South Australia.

During the absence on active service of Dr. J. K. Couch, Dr. Edward Albert Officer has been appointed Acting Honorary Physician to the King Edward Memorial Hospital for Women, Subiaco, Western Australia.

Medical Appointments Vacant, etc.

For announcements of medical appointments vacant, assistants, locum tenentes sought, etc., see "Advertiser," page xvii.

Brisbane Hospital, Junior Resident Medical Officers.

Dunwich Benevolent Asylum and Inebriate Institution, Medical Superintendent.

Medical Appointments.

IMPORTANT NOTICE.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
TASMANIA. (Hon. Sec., Bellerive, Tasmania.)	Medical Officers in all State-aided Hospitals in Tasmania.
VICTORIA. (Hon. Sec., Medical Society Hall, East Melbourne.)	Brunswick Medical Institute. Bendigo Medical Institute. Prahran United F.S. Dispensary. Australian Prudential Association Proprietary, Limited. National Provident Association. Life Insurance Company of Australia, Limited. Mutual National Provident Club.
QUEENSLAND. (Hon. Sec., B.M.A. Building, Adelaide Street, Brisbane.)	Medical Officers to the Selwyn Hospital, North Queensland. Brisbane United Friendly Society Institute Warwick Hospital.
SOUTH AUSTRALIA. (Hon. Sec., 3 North Terrace, Adelaide.)	The F.S. Medical Assoc., Incorp., Adelaide.
WESTERN AUSTRALIA. (Hon. Sec., Health Department, Perth.)	All Contract Practice Appointments in Western Australia.
NEW SOUTH WALES. (Hon. Sec., 30-34 Elizabeth Street, Sydney.)	Australian Natives' Association. Balmain United F.S. Dispensary. Canterbury United F.S. Dispensary. Leichhardt and Petersham Dispensary. M.U. Oddfellows' Med. Inst., Elizabeth Street, Sydney. Marrickville United F.S. Dispensary. N.S.W. Ambulance Association and Transport Brigade. North Sydney United F.S. People's Prudential Benefit Society. Phœnix Mutual Provident Society. F.S. Lodges at Casino. F.S. Lodges at Lithgow. F.S. Lodges at Parramatta, Penrith, Auburn and Lidcombe. Newcastle Collieries — Killingworth, Seaham Nos. 1 and 2, West Wallsend.
NEW ZEALAND: WELLINGTON DIVISION. (Hon. Sec., Wellington.)	Friendly Society Lodges, Wellington, N.Z.

Diary for the Month.

July 10.—Tas. Branch, B.M.A., Council and Branch.
July 10.—N.S.W. Branch, B.M.A., Ethics Committee.
July 12.—Vic. Branch, B.M.A., Council.
July 13.—S. Aust. Branch, B.M.A., Council.
July 13.—N.S.W. Branch, B.M.A., Clinical.
July 17.—N.S.W. Branch, B.M.A., Executive and Finance Committee.
July 18.—W. Aust. Branch, B.M.A., Branch.
July 20.—Q. Branch, B.M.A., Council.
July 20.—Eastern Suburbs Med. Assoc. (N.S.W.).
July 21.—Northern Suburbs Med. Assoc. (N.S.W.).
July 25.—Vic. Branch, B.M.A., Council.
July 26.—S. Aust. Branch, B.M.A., Branch.
July 27.—N.S.W. Branch, B.M.A., Branch.
July 31.—N.S.W. Branch, B.M.A., Medical Politics Committee; Organization and Science Committee.
Aug. 1.—Vic. Branch, B.M.A., Branch.
Aug. 3.—Q. Branch, B.M.A., Branch.

EDITORIAL NOTICES.

Manuscripts forwarded to the office of this Journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to *The Medical Journal of Australia* alone, unless the contrary be stated.

All communications should be addressed to "The Editor," *The Medical Journal of Australia*, B.M.A. Building, 30-34 Elizabeth Street, Sydney, New South Wales.